KS
2011

C 04
CPA 04

C 04 CPA 04

Ultra Compact – Ultra Natural

The bi amplified C 04 and CPA 04 are the ideal compact solution. They are designed for many different applications such as source and surround speakers in theatrical applications, in multi media rooms, for conference rooms and at trade shows, for small solo acts and as under balcony and/or delay speakers, front fills etc.

The C 04 / CPA 04 also serve as a compact mid hi cabinet with the subwoofer CW 210 / CPD B or other KS AUDIO subwoofers. Another use would be a high quality multi zone background music / announcer.
The C 04 and CPA 04 are universal tools for a demanding pro application with the highest audio quality in the most compact size. The drivers consist of a 4.5“ low/mid driver with an torsionally stiff carbon fiber cone and a coaxial pole core diaphram with neodymium magnets. KS AUDIO adapted from it’s own studio monitor development, the coaxial principle of low and high drivers as it proved it’s extreme high efficiency in the studio recording as an ideal point source.

Two built in class D amplifiers supply 150 watts peak in total to both the 4.5” woofer and the 1“ dome tweeter.

The electronic crossover and built in filters are precisely designed for the drivers and results in a much higher audio level compared to an unpowered version. In the case of high input levels, a built in compressor protects all components from damage and increases the subjective volume level yielding the impression of louder volumes.

The box construction is very robust and extremly compact and is made out of steal and solid lightweight metal parts. The box is covered with a textured polyurethane coating. The construction features a recessed 3/8“ mike stand mount on the bottom, a metal grill to cover the front and 2 M6 mounting points to fly the speaker or to attach the optional steel mounting bracket.

The 2 way controller – amp is built in on the back side and does not need any additional cooling. The electronically balanced input/output connectors are XLR and XLR F respectively. Apart from the on off switch, there is an LED showing the ready status and a volume control knob.

CPA 04

Technical Specifications

frequency response	100 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	110dB / 113dB peak
dispersion angle (horizontal x vertical in degrees)	120 x 120
recommended amplifier / system controller type	KS CA 4D / D MOD® or FIRMOD2®
transducers coaxial	4,5” carbon cone + 1” ND
power rms/peak in Watts (AES standard)	50 + 25 / 100 + 50
amplification / x-over	active 2-way bi-amp / 2,000Hz
input / output connectors	Speakon NL4
cabinet	light weight steel
grill	perforated RVS
finish	charcoal polyurethane
dimensions (height x width x depth)	15 x 15 x 15 cm 5.9” x 5.9” x 5.9”
weight (without options)	2 kg 4.4 lbs
features	3/8” pole mount, 2 x M6 mounting points
options	bracket in U-shape, 100V transducer, finish available in 200 RAL colors

C 04 unpowered

C 04

Technical Specifications

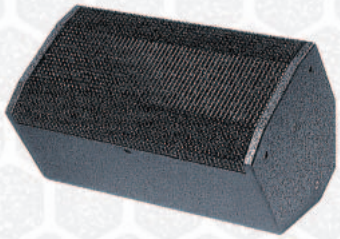
frequency response	100 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	110dB / 113dB peak
dispersion angle (horizontal x vertical in degrees)	120 x 120
integrated amplifier / system controller type	class D /100kHz bandwidth, bi-amped analog
transducers coaxial	4.5” carbon cone + 1” ND
power rms/peak in Watts (AES standard)	50 + 25 / 100 + 50
amplification / x-over	active 2-way bi-amp analog / 2,000Hz
input connectors	XLR3 / IEC power inlet
output connectors	XLR3 thru
cabinet	light weight steel
grill	perforated RVS
finish	charcoal polyurethane
dimensions (height x width x depth)	15 x 15 x 15 cm 5.9” x 5.9” x 5.9”
weight (without options)	3.5 kg 7.7 lbs
features	3/8” pole mount, 2 x M6 mounting points
options	bracket in U-shape, finish available in 200 RAL colors, powerCON connector

CPA 04 powered

C 04 installed in the “THALIA” playhouse in Hamburg, Germany.

Technical Specifications

	CL 106 unpowered
frequency response	85 - 20,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	116dB / 121dB peak
dispersion angle (horizontal x vertical in degrees)	100 x 100
recommended amplifier / system controller type	KS CA 4D / DMOD® or FIRMOD2®
transducers	6" carbon cone + 1" driver + waveguide
power rms/peak in Watts (AES standard)	120 / 200 peak at 8 ohm
amplification / x-over	active 2-way / 2,000Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS with acoustic foam (inside)
finish available	anthracite polyurethane
dimensions (height x width x depth)	35.4 x 19 x 20 cm 13.9" x 7.5" x 7.8"
weight (without options)	8 kg 18 lbs
features	4 x M6 mounting points
options	bracket in U-shape 100V transducer



CL 106

UNPOWERED

CL 208 CPD 08

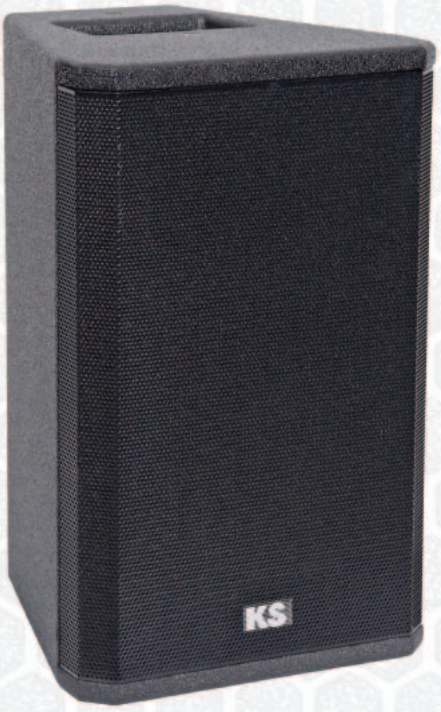
The small CL 208 made a name for itself among professional operators worldwide. In its self-powered format, the CPD 08 complements the KS AUDIO CPD-Series of DSP controlled active self-powered systems with built-in amplifiers and a FIR CONTROL DSP.
An integrated PWM amplifier – 200W for the 8" long throw woofer and an analog FET-amplifier – 50W for the 1" tweeter - with a peak performance of 500W. The FIR crossover and filter are specially designed for the speaker and increase the audio quality over the passive system. With the CPD 08, KS AUDIO has responded to the demanding needs of the professional operator with a universal self-powered loudspeaker with the highest audio quality in a compact size.
There are many applications in which the CL 208 and CPD 08 can be used: surround sound speakers in a Theatre, for small live events, in a media-room, for use at a conference or convention, in large rooms or tents, as a front fill, under blacony or as a delay system for far way areas, or as a compact middle-high tone system in one of the many KS AUDIO subwoofers, we recommend the CW 210 or CPD B subwoofer.
The rear mounted 2-way DSP-controller amplifier of the CPD 08 operates very efficiently without the need of a cooling fan. The FIR crossover and filter are specially matched to the drivers, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. In addition to the power switch, the control panel also has a selectable digital volume / delay delay control to individually adjust just for each venue and offers a digital delay reaching up to 40 m (120ft) for decentralized PA systems. The starting current is electronically limited. A powerCON connector is fitted.

Technical Specifications

	CL 208 unpowered
frequency response	68 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	120dB / 123dB peak
dispersion angle (horizontal x vertical in degrees)	90 x 60
recommended amplifier / system controller type	CA 4D / D MOD® or FIRMOD2®
transducers	8" cone + 1" driver + waveguide
power rms / peak in Watts (AES standard)	200 + 50 / 400 + 100
amplification / x-over	full-range mode / 2,000Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	40 x 24 x 28 cm 15.7" x 9.4" x 11"
weight (without options)	12 kg 26.4 lbs
features	35mm pole mount, 4 x M6 mounting points
options	mounting frame, black HD cover, finish available in 200 RAL colors

FIR CONTROL® inside

The CL 208 / CPD 08 can be mounted vertically or horizontally.



Technical Specifications

	CPD 08 powered
frequency response	68 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	120dB / 123dB peak
dispersion angle (horizontal x vertical in degrees)	90 x 60
integrated amplifier / system controller type	PWM / FIR CONTROL®, DSP
transducers	8" cone + 1" driver + waveguide
power rms/peak in Watts (AES standard)	200 + 50 / 400
amplification / x-over	active / bi-amp 2,000Hz
input connectors	XLR3 / powerCON inlet
output connectors	XLR3 thru
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	40 x 24 x 28 cm 15.7" x 9.4" x 11"
weight (without options)	14 kg 31 lbs
features	FIR CONTROL®, integrated digital delay with display, 35mm pole mount, 4x M6 mounting points, powerCON connector
options	mounting frame, black HD cover, finish available in 200 RAL colors

CM210

CM210 CM112 CM215

UNPOWERED

The CM series represents the KS AUDIO line of well proven floor monitors. The design is compact, slick, and universally applicable in situations where the best audio reproduction is desired.

The CM210, the most compact and basic product is a must for each rental company and show.

CM 112, if you want the best sound on a budget price this is the one!
Switchable between full range and biamped.

CM 215 the absolute power packed full range or biamped unit in the line up.

All floor monitors are designed to operate as a main PA speaker as well. As a floor monitor, the wider dispersion is vertical and as a main enclosure, the wider dispersion is horizontal. The 45 degree angling of the speaker enclosure results in an even dispersion at ear level. The artist has a large sweet spot to use without risking feedback or loss of definition

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. There is a pole mount in the bottom of the cabinet and a protective steel grill on the front, with or without acoustic foam, are further features of this high-quality product. Also, all of these monitors have four M6 threaded rigging points on them for permanent installations as well as recessed speaker inputs (one on each side) as well as a handle on each side to allow for one or 2 hand operation.

These floor monitors can be used as FOH PA top boxes and as such can be combined with several of the KS AUDIO subwoofers (see: there is a pole mount insert in each product).

Technical Specifications	CM 210 unpowered	CM 112 unpowered	CM 215 unpowered
frequency response	80 - 16,000Hz +/- 3dB	50 - 18,000Hz +/- 3dB	50 - 18,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	120dB / 126dB peak	126dB / 132dB peak	126dB / 132dB peak
dispersion angle (horizontal x vertical in degrees)	90 x 40	90 x 40 CD-horn	90 x 40 CD-horn
recommended amplifier / system controller type	KS CA 4D or TA 4D / D MOD® or FIRMOD®	KS CA 4D or TA 4D / D MOD® or FIRMOD®	KS CA 4D or TA 4D / D MOD® or FIRMOD®
transducers	10" cone + 1" driver	12" cone / 1" driver	15" cone + 2" driver
power rms / peak in Watts (AES standard)	200 / 400	300 + 70 / 600 + 140	300 + 70 / 600 + 140
amplification / x-over	full-range / 1,500Hz	bi-amp or full-range (switchable) / 1,200Hz	bi-amp or fullrange (switchable) / 1,000Hz
input / output connectors	Speakon NL 4	Speakon NL4	Speakon NL4
cabinet	birch plywood	birch plywood	birch plywood
grill	perforated RVS + acoustic foam (inside)	perforated RVS + acoustic foam (inside)	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane	charcoal polyurethane	charcoal polyurethane
dimensions (height x width x depth)	32 x 47 x 42 cm 12.6" x 18.4" x 16.5"	33 x 60 x 42 cm 13" x 23.6" x 16.5"	40 x 67 x 52 cm 15.7" x 26.4" x 20.5"
weight (without options)	16 kg 35 lbs	26 kg 48 lbs	32 kg 70 lbs
features	35mm pole mount, 4 x M6 mounting points	35mm pole mount / 4x M6 mounting points	35mm pole mount, 2 x M6 mounting points
options	mounting frame, black HD cover, finish available in 200 RAL colors	mounting frame / black HD cover, finish available in 200 RAL colors	bracket in U-shape, black HD cover, finish available in 200 RAL colors

CM112

CM215

T4 M UNPOWERED

The T4 M is the flag ship floor monitor from KS AUDIO.

A compact 2-way bi-amped speaker with the highest level of performance, sound pressure levels, and audio quality and a loading capacity down to the lowest frequencies.

The T4 M is unmatched in the industry in regards to the lowest distortion and absolute phase linearity in the smallest size possible. With the 12″ woofer that can handle 500W and a 2″ tweeter that can handle 120W the T4 M gives you long endurance with a peak overall power handling of 2,000W.

The sound dispersion in the mid / hi horn is completely even across the audio spectrum and the HF wave front continues thru the cut-off frequency as well as the crossover frequency, without any variance in the frequency response.

Both the 12″ woofer with a 4″ voice coil and the 2″ compression driver with a 4″ membrane have strong but light neodymium magnets, and will spoil you with it's even and smooth dispersion characteristics. The 4″ membrane of the compression driver consists of a special aluminum alloy that has a clearly reduced distortion factor in comparison to a titanium membrane.

The T4 M dispersion properties are optimized for use as a floor monitor. Both horizontal and vertical dispersion angles are 60 degrees. The 45 degree angling of the speaker cabinet results in an even dispersion at ear level, especially in the nearfield of the monitors. The artist has a large sweet spot to use without risking feedback or loss of definition which gives the artist a great freedom to move and enabling the sound engineer to keep control at any point.

The speaker cabinet construction is, like all KS AUDIO products, built from birch plywood with an extremely robust charcoal colored polyurethane coating.

There is a pole mount in the bottom of the cabinet and a protective steel grill on the front, with or without acoustic foam, and handles on the top and sides are further features of this high-quality product.

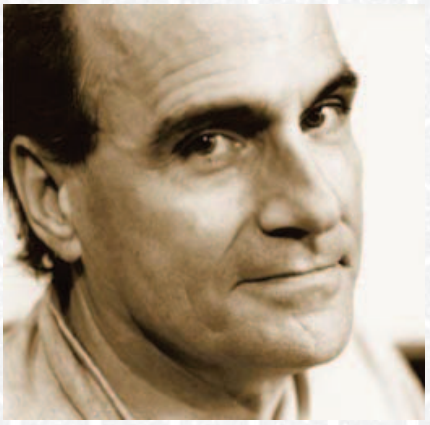
Please note, all specifications are only achieved using KS AUDIO amplifiers and controllers.

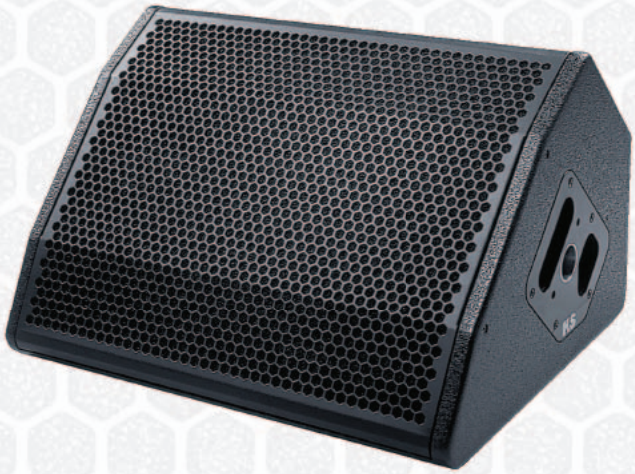
The T4 M can be used as FOH PA top box and as such can be combined with several of the KS AUDIO subwoofers (see: pole mount insert.

Technical Specifications

	T4 M unpowered
frequency response	70 - 18,500 Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	134dB / 140dB peak
dispersion angle (horizontal x vertical in degrees)	60 x 60 horn
recommended amplifier / system controller type	TA4D / D MOD® or FIRMOD2®
transducers	12″ ND cone + 2″ ND compression driver
power rms / peak in Watts (AES standard)	500 + 120 / 1,000 + 240
amplification / x-over	bi-amped only / FIRMOD2®
input / outpu connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (from inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	36 x 56 x 46 cm 14.1″ x 22″ x 18″
weight (without options)	23 kg 51 lbs
features	35mm pole mount / 4x M6 mounting points
options	mounting frame / black HD cover, finish available in 200 RAL colors

T4 M
On tour with
JAMES TAYLOR
&
and FOH engineer
John Godenzi





CPD 1M POWERED

FIR CONTROL® inside

The CPD 1M, a 2 way floor monitor, complements the KS AUDIO CPD-Series of DSP controlled active self-powered systems and its xtremely compact wedge-shape, resulting in the highest sound pressure level even in the lower frequency ranges while simultaneously having the lightest weight possible. The DSP-Controller works with KS AUDIO FIR-Filter technology for true impulse-correct reproduction of audio and increased resistance to feedback. There are two integrated amplifiers – 400W for the 10" driver and 40W for the 1" tweeter - with a peak performance of 800W !! The CPD 1M horn is designed for normal floor monitor operation. However, because of its rectangular dimensions of the HF horn unit it can be used in a 90° turned assembly. Therefore the CPD 1M also has the ability to be used on stands and as a FOH pa top box.

The electronics are comprised of a switch mode power supply with Power-factor-Correction, a "cold" PWM amplifier for bass/midrange performance, and a analog FET-amplifier with the best audio characteristics for the mid-high compression driver. The 10" long throw driver is equipped with a very powerful, yet light, neodymium magnet. The 1" HF compression driverwhas a 3" ring membrane made of Mylar that has a distinctly reduced distortion factor when compared to a titanium membrane.

With the CPD 1M, KS AUDIO has responded to the demanding needs of the professional operator with a universal self-powered loudspeaker with the highest audio quality in an extremely compact size. There are many applications in which the CPD 1M can be used: Theatre, Live-stage Music, in large rooms or tents, as a delay system for far away areas, or as a compact middle-high tone system in combination with one of the many KS subwoofers, we recommend for example the CPD B or the CPD W1 Sub-woofer.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. A pole mount on the bottom of the cabinet and a protective steel grill, with or without acoustic foam, are further features of this high-quality product.

The rear mounted 2-way FIR CONTROL® DSP / amplifier operates very efficiently without the need of a cooling fan. The FIR crossover and filter are specially matched to the drivers, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. In addition to the power switch, the control panel also has a selectable digital volume / delay control to individually adjust for each venue and offers a digital delay reaching up to 40 m(120ft) for decentralized PA systems.

The CPD 1M operates on AC 117V or 230V electrical supply. The starting current is electronically limited. A PowerCON connector is fitted.

Technical Specifications	CPD 1M powered
frequency response	68 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	128dB / 131dB peak
dispersion angle (horizontal x vertical in degrees)	50 x 90 rotatable
integrated amplifier / system controller type	PWM / FIR CONTROL®, DSP
transducers	10" ND cone + 1" ND compression driver
power rms/peak in Watts (AES standard)	400 + 40 / 800
amplification / x-over	bi-amp mode / 1500Hz
input connectors	XLR3 / powerCON inlet (117/230VAC)
output connectors	XLR3 thru
cabinet	birch plywood
grill	perforated RVS + acoustic foam (from inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	28 x 50 x 37 cm 11" x 19.6" x 14.5"
weight (without options)	15 kg 33 lbs
features	35mm pole mount
options	black HD cover, mouting frame, finish available in 200 RAL colors

Opera Houses & Play Houses Germany

Kammerspiele München · Alte Oper Mozart Saal, Frankfurt · Alter Oper Foyer, Kammerspiel, Frankfurt · Städtische Bühnen Schauspiel,Frankfurt · Nationaltheater kleines Haus, Mannheim · Nationaltheater Jugentheater, Philharmonie, Köln · Kurhaus, Wiesbaden · Tuchfabrik, Trier · Tanzbrunnen, Puppenbühne, Zwickau · GF Händel Halle, Halle · Theater, Gera · Neues Theater, Halle · Felsenbühne,Ratebeu · Landesbühne, Sachsen

FIR CONTROL® inside

CPD 12M POWERED

COAXIAL

The CPD 12M complements the KS AUDIO line of the CPD-Series of FIR CONTROL® / DSP controlled active self-powered systems with a very compact wedge-shaped and coaxial driver design making it an excellent stage monitor. Due to its coaxial arrangement of the low-mid driver and mid-high driver the directivity is well balanced in near field applications and helps to prevent feedback. The DSP-Controller works with KS AUDIO FIR-Filter technology for true impulse-correct reproduction of audio and increased resistance to feedback resulting in a beyond expected sound pressure level that guarantees a natural audibility. Two integrated amplifiers supply 500W for the 12" woofer and 100W for the 1.4" tweeter - with a peak performance of 1,200W !!

The electronics are comprised of a switch mode power supply with Power-Factor-Correction, a "cold" PWM amplifier for bass/midrange performance, and an analog FET-amplifier with the best audio characteristics for the mid-high compression driver. Both the 12" long excursion woofer and the 1.4" compression driver have strong but light neodymium magnets. The 3" membrane of the compression driver consist of a special aluminum alloy that has a clearly reduced distortion factor in comparison to a titanium membrane. With the CPD 12M, KS AUDIO has responded to the demanding needs of the professional operator with a universal, self-powered loudspeaker with the highest audio quality in a compact size.

There are many applications in which the CPD 12M can be used: Theatre, Live-stage Music, in large rooms or tents, as a delay system for far away areas, or as a compact middle-high tone system in combination with one of the many KS AUDIO subwoofers, we recommend the CPD W subwoofer. The CPD 12M is equipped with a 12" neodymium lower-middle tone chassis with a 4" voice coil, and a coaxially arranged 1.4" neodymium tweeter. The CPD 12M is equally suitable for a normal speaker stand as well as a flying assembly.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. Another special feature is the multipurpose fitting on the back of the speaker, allowing the installation of different fly-ware and connectors, which are safely interlocked by means of quick release push-pins. A protective steel grill on the front, with or without acoustic foam, are further features of this high-quality product.

The rear mounted 2-way FIR CONTROL® DSP amplifier operates very efficiently without the need of a cooling fan. The FIR crossover and filter are specially matched to the drivers, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. The control panel also has a digital volume control to individually adjust for each venue and a digital delay up to 140ms or 40m (120ft) for time alignment and decentralized PA systems. There is a Lo Cut switch for speech reproduction or for adding a subwoofer to the system. Operation and set-up with a PC using the KS AUDIO REMOTE 3 Software is also possible over an Ethernet connection.

The CPD 12 M operates on all AC 110-240V electrical supply. The starting current is electronically limited. There are two PowerCON F+M connectors which allows you to link additional KS CPD products, such as a CPD Sub-woofer.

Technical Specifications	CPD 12M powered
frequency response	58 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	131dB / 136dB peak
dispersion angle (horiz. x verti. in degr.)	60 x 60, coaxial
integr. amplifier / system controller type	PWM, class D fully bridged / FIR CONTROL®, DSP
transducers	12" ND cone + 1" compression driver (coaxial)
power rms / peak in Watts (AES standard)	500 + 100 / 1,000 + 200
amplification / x-over	bi-amp mode / 1,200Hz
input signal	automatic detection analog or digital AES/EBU
input connectors	XLR3 / powerCON inlet (117/230VAC)
output connectors	XLR3 - thru / powerCON outlet
cabinet	birch plywood
grill	perforated RVS + acoustic foam (from inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	35 x 58 x 41 cm 13.7" x 22.7" x 16.1"
weight (without options)	25 kg 55 lbs
features	ethernet in/out, remote controlled, integrated digital delay with display, multipurpose rigging fittings, self regulating power supply
options	multipurpose rigging ware, black HD cover, finish available in 200 RAL colors

er Oper, Dresden Schauspielhaus, Leipzig Oper, Leipzig Oper, Frankfurt
Frankfurt Alte Oper Hindemith Saal,Frankfurt Städtische Bühnen, Frankfurt
tädtische Bühnen Probebühne, Frankfurt Ensemble Modern, Frankfurt
nheim Badisches Staatstheater, Karlsruhe Städtische Bühnen, Heilbronn
öln Musikalische Komödie, Leipzig Theater, Heidelberg Theater, Cottbus
ielhaus, Dresden Vogtlandtheater, Plauen Theater, Zwickau Oper, Halle
Theater, Amberg TAT Altes Straßenbahndepot Pfalzbau, Ludwigshafen

CL 208 CPD 08

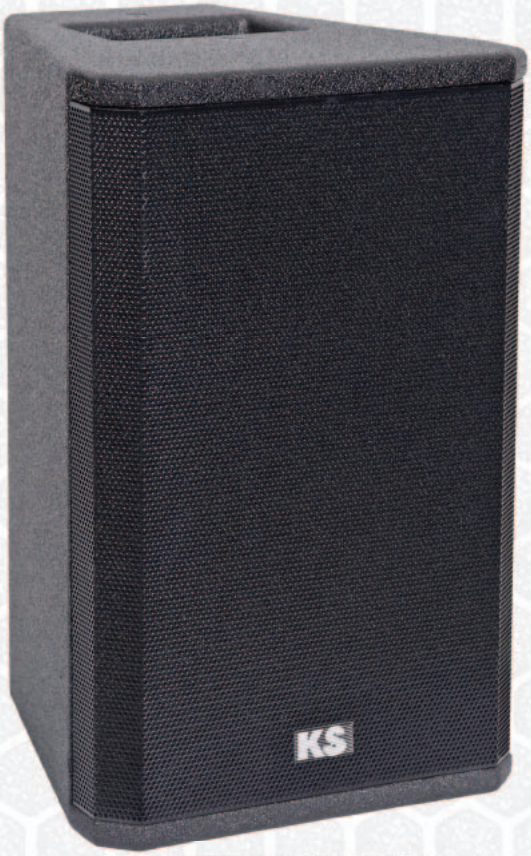
FIR CONTROL® inside

The small unpowered CL 208 made a name for itself among professional operators worldwide. In its self-powered format, the CPD 08 complements the KS AUDIO CPD-Series of DSP controlled active self-powered systems with built-in amplifiers and a FIR CONTROL® DSP. An integrated PWM amplifier – 200W for the 8" long throw woofer and an analog FET-amplifier – 50W for the 1" tweeter - with a peak performance of 500W. The FIR crossover and filter are specially designed for the speaker and increase the audio quality over the passive system. With the CPD 08, KS AUDIO has responded to the demanding needs of the professional operator with a universal self-powered loudspeaker with the highest audio quality in a compact size.

There are many applications in which the CL 208 and CPD 08 can be used: surround sound speakers in a Theatre, for small live events, in a media-room, for use at a conference or convention, in large rooms or tents as a front fill, under balcony or as a delay system for far way areas, or as a compact middle-high tone system in one of the many KS subwoofers, we recommend the CW 210 or CPD B Subwoofer.

The rear mounted 2-way DSP-controller amplifier of the CPD 08 operates very efficiently without the need of a cooling fan. The FIR crossover and filter are specially matched to the drivers, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. In addition to the power switch, the control panel also has a selectable digital volume / delay control to individually adjust just for each venue and offers a digital delay reaching up to 40 m (120 ft) for decentralized PA systems. The starting current is electronically limited. A PowerCON connecctor is fitted.

The CL 208 / CPD 08 can be mounted vertically or horizontally.



Technical Specifications

	CL 208 unpowered
frequency response	68 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	120dB / 123dB peak
dispersion angle (horizontal x vertical in degrees)	90 x 60
recommended amplifier / system controller type	CA 4D / D MOD® or FIRMOD2®
transducers	8" cone + 1" driver + waveguide
power rms / peak in Watts (AES standard)	200 + 50 / 400 + 100
amplification / x-over	full-range mode / 2,000Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	40 x 24 x 28 cm 15.7" x 9.4" x 11"
weight (without options)	12 kg 26.4 lbs
features	35mm pole mount, 4 x M6 mounting points
options	mounting frame, black HD cover, finish available in 200 RAL colors

Technical Specifications

	CPD 08 powered
frequency response	68 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	120dB / 123dB peak
dispersion angle (horizontal x vertical in degrees)	90 x 60
integrated amplifier / system controller type	PWM bridged/ FIR CONTROL®, 2-way DSP
transducers	8" cone + 1" driver + waveguide
power rms/peak in Watts (AES standard)	200 + 50 / 400
amplification / x-over	active / bi-amp 2,000Hz
input connectors	XLR3 / powerCON inlet
output connectors	XLR3 thru
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	40 x 24 x 28 cm 15.7" x 9.4" x 11"
weight (without options)	14 kg 31 lbs
features	integrated digital delay with display, 35mm pole mount, 4 x M6 mounting points, powerCON connector
options	mounting frame, black HD cover, finish available in 200 RAL colors

"Victory Fellowship" Church
New Orleans, LA, USA

HDSP® TECHNOLOGY

High Definition Sound Projection

KS AUDIO Germany has continiously delivered several new ideas, original deisgns and inventions since the beginning of the company back in 1979 and its inception in 1972. Now KS AUDIO has done it - again.

Various cabinets, indicated in this catalog by "HDSP®" (High Definition Sound Projection radiationprinciple) are the first loudspeakers worldwide with the revolutionary technology invented by KS AUDIO. These revolutionary products offer: Power Factor Correction (PFC) - wide range switch mode power supply, neodymium magnets and PWM (Pulse Width Modulation) power amplifiers offering the highest output at the lowest possible size and weight. The newly designed rigging hardware, as well as the excellent acoustical properties guarantees virtually unlimited configurations for simple and fast installations.

The cylindrical waveguide horn unit is a one piece glass fiber reinforced assembly recessed into the front wall of the cabinet. This enclosure is made from a high strength, water resistant birch plywood designed to stop natural vibrations due to high sound pressure levels.

In addition, the waveguide / horn handles how the frequencies above 2kHz are dispersed into the audience. The new HDSP® (High Definition Sound Projection) design drastically increases image intelligibility, especially in areas where strong wall reflections are present. The energy of the high frequency driver is created in a wave guide to produce a sound field with varying distances to a vertically bent line, meaning that the sound is dispersed from the horn at 120° wide by a 20° vertical dispersion in the near field and at only 60° wide and a 15° vertical dispersion in the far field, with an overall 5° down-angle with no acoustical energy radiated above the top of the cabinet.

The result is that all sound energy is directed in a bent wave front to point downwards towards the audience and not to the walls or the ceiling, resulting in an extremely even sound pressure distribution in the width as well as the depth of a room.

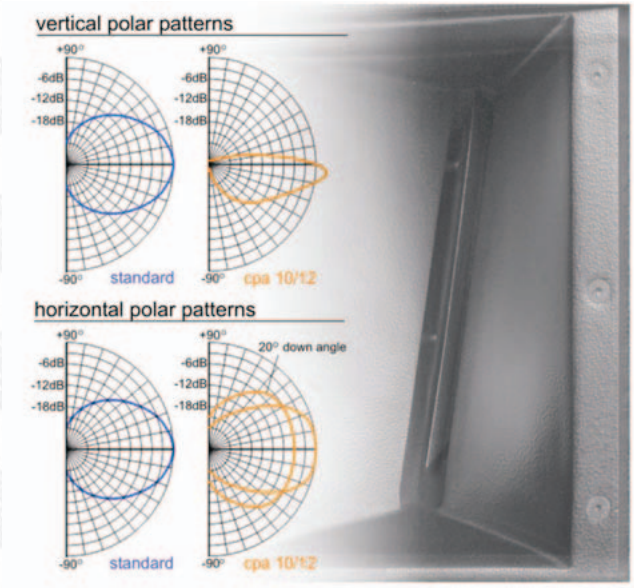
Thus, by precisely adjusting the sound field image from within the crossover area between the low frequency driver and the mid/high frequency driver, the signal is time aligned and phase corrected so that the inclined radiation axis is maintained within a wide frequency range.

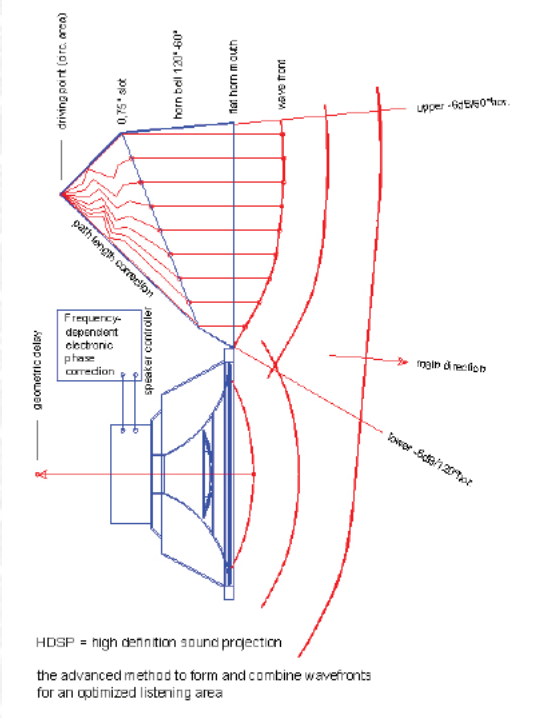
The frequency of the high pass filter has been selected so that the image focus resulting from the woofer diameter corresponds to the image focusing of the middle / high frequency driver to combine the wave fronts for an optimized and coherent listening area.

The real world results are a reduction in inventory and equipment as well as labor cost for rental corporations and required installation size and time both for rental and fixed installations.

One KS AUDIO speaker per side does the job of 2 or more other speakers per side, thus, it is no longer necessary to install additional loudspeakers for the front fill and far field ranges.

HDSP® High Definition Sound Projection





CPD 1 POWERED

HDSP® inside

FIR CONTROL® inside

The CPD 1 complements the KS AUDIO CPD-Series of FIR CONTROL® DSP active self-powered systems with the unique directivity of HDSP® technology, resulting in the highest sound pressure level even in the lower frequency ranges while simultaneously having the lightest weight possible. The DSP-Controller works with KS AUDIO FIR-Filter technology for true impulse-correct reproduction of audio. There are two integrated amplifiers – 400W for the 10" driver and 40W for the 1" tweeter - with a peak performance of 800W

The sound dispersion from the HDSP® mid/high frequency horn and its electronic blending with the bass/midrange driver is truly very unique. The HDSP® design results in multiple integrated dispersion angles that widen downwards towards the near field of the speaker while maintaining tight pattern control and long throw capability. The vertical bending of the HF wave front continues thru the cut-off frequency as well as the crossover frequency, without any variance in the frequency response. This means that with a standard two-speaker setup, the audience in close proximity to the speakers will enjoy the same audio quality and definition as those further away.

The electronics are comprised of a switch mode power supply with Power-factor-Correction, a "cold" PWM amplifier for bass/midrange performance, and an analog FET-amplifier with the best audio characteristics for the mid-high compression driver.
Both the 10" Long throw woofer and the 1" compression driver have strong but light neodymium magnets. The 1" compression driver works with a 3" ring membrane made of Mylar that has a distinctly reduced distortion factor when compared to a titanium membrane.

With the CPD 1, KS AUDIO has responded to the demanding needs of the professional operator with a universal self-powered loudspeaker producing the highest audio quality in a compact size. There are many applications in which the CPD 1 can be used: Theatre, Live-stage Music, in large rooms or tents, as a delay system for far away areas, or as a compact middle-high frequency system in combination with one of the many KS AUDIO subwoofers we recommend the CPD B or the CPD W1 subwoofer.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts.

There is a pole mount in the bottom of the cabinet and a protective steel grill on the front, with or without acoustic foam, are further features of this high-quality product.

The rear mounted 2-way DSP-controller/amplifier operates very efficiently without the need of a cooling fan. The FIR crossover and filter are specially matched to the drivers, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. In addition to the power switch, the control panel also has a selectable digital volume / delay control to individually adjust for each venue and offers a digital delay reaching up to 40 m (120ft) for decentralized PA systems.

The CPD 1 operates on AC 117V-230V electrical supply. The starting current is electronically limited. A PowerCON connector is fitted.

C 1 UNPOWERED

Same as CPD 1 but unpowered.

Technical Specifications

frequency response	68 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	128dB / 131dB peak
dispersion angle (horiz. x vertical in degrees)	HDSP® asymm. 60 - 120 x 35 - 5 dgr tilt
recom. amplifier / system controller type	KS CA 4D or TA 4D / D MOD® or FIRMOD2®
transducers	10" ND cone + 1" Mylar compression driver
power rms / peak in Watts (AES standard)	400 / 800
amplification / x-over	full-range mode / 1,500Hz passive
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	52 x 30 x 33 cm 20.5" x 11.8" x13"
weight (without options)	17 kg 37 lbs
features	35mm pole mount / 4x M6 mounting points
options	mounting frame / black HD cover, finish available in 200 RAL colors

Technical Specifications

frequency response	68 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	128dB / 131dB peak
dispersion angle (horizontal x vertical in degrees)	HDSP asymm. 60 - 120 x 35 - 5 dgr tilt
integrated amplifier / system controller type	PWM and bipolar bridge / FIR CONTROL®
transducers	10" ND cone + 1" Mylar compression driver
power rms/peak in Watts (AES standard)	400 + 40 / 800
amplification / x-over	2-way bi-amp 1,500Hz phase linear FIR
input connectors	XLR3 / powerCON inlet 117/230 VAC
output connectors	XLR3 thru
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	52 x 30 x 33 cm 20.5" x 11.8" x13"
weight (without options)	20 kg 44 lbs
features	integrated digital delay with display, 35mm pole mount, 4 x M6 mounting points, powerCON connector , self regulating power supply
options	mounting frame, black HD cover, finish available in 200 RAL colors

CPD 10 POWERED

HDSP® inside

FIRTEC® inside

The CPD 10 complements the KS AUDIO CPD-Series of FIR CONTROL® DSP active self-powered systems with the unique directivity of HDSP® technology, resulting in the highest sound pressure level even in the lower frequency ranges while simultaneously having the lightest weight possible. The DSP controller works with KS AUDIO FIRTEC DSP technology for true impulse-correct reproduction of audio. There are two integrated amplifiers – 800W RMS for the 10" woofer and 200W RMS for the 1.4" tweeter - with a peak performance of 2,000W !!

The sound dispersion design of the HDSP® mid/high frequency horn and its electronic blending with the bass/midrange driver is very unique. The HDSP® design results in multiple integrated dispersion angles that widen downwards towards the near field of the speaker while maintaining tight pattern control and long throw capability. The vertical bending of the HF wave front continues thru the cut-off frequency as well as the cross-over frequency, without any variance in the frequency response. This means that with a standard two-speaker setup, the audience in close proximity to the speakers will enjoy the same audio quality and definition as those further away.

The electronics are comprised of a switch mode power supply with Power-Factor-Correction, a "cold" PWM amplifier for bass/midrange performance, and an analog FET-amplifier with the best audio characteristics for the mid-high compression driver. Both the 10" Long throw woofer and the 1.4" compression driver have strong but light Neodymium magnets. The 3" membrane of the compression driver consists of a special aluminum alloy that has a clearly reduced distortion factor in comparison to a titanium membrane.

With the CPD 10, KS AUDIO has responded to the demanding needs of the professional operator with a universal self-powered loudspeaker producing the highest audio quality in a compact size. There are many applications in which the CPD 10 can be used: Theatre, Live-stage Music, in large rooms or tents, as a delay system for far away areas, or as a compact middle-high frequency system in combination with one of the many KS AUDIO subwoofers, we recommend the CPD W1 subwoofer.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. Another special feature is the two multipurpose fittings on the back of the speaker. Allowing the installation of different fly-ware and connectors, which are safely interlocked by means of quick release push-pins. There is a pole mount in the bottom of the cabinet and a protective steel grill on the front, with or without acoustic foam, are further features of this high-quality product.

The rear mounted 2-way FIRTEC® DSP amplifier operates very efficiently without the need of a cooling fan. The FIR crossover and filter are specially matched to the drivers, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. The control panel also has a digital volume control to individually adjust for each venue and a digital delay reaching up to 40 m for decentralized PA systems. There is a Lo Cut switch for speech reproduction or for adding a subwoofer to the system. Operation and set-up with a PC using the KS AUDIO REMOTE 3 Software is also possible over an Ethernet connection. The power supply on the CPD 10 operates on all AC 110-240V electrical supply.

The starting current is electronically limited. There are two PowerCON F+M connectors which allows you to link additional KS AUDIO CPD products, such as a CPD subwoofer.

C 10 UNPOWERED

Same as CPD 10 but unpowered.

Technical Specifications

frequency response	63 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	131dB / 136dB peak
dispersion angle (horiz. x vertical in degrees)	HDSP asymm. 60-120 x 35 -5 dgr. tilt
recom. amplifier / system controller type	KS CA 4D or TA 4D / D MOD® or FIRMOD2®
transducers	10" ND cone + 1.4" ND compression driver
power rms / peak in Watts (AES standard)	500 + 100 / 1.2kW
amplification / x-over	bi-amp or full-range mode (switchable)/1,400Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	52 x 30 x 35 cm 20.4" x 11.7" x 13.8"
weight (without options)	19 kg 42 lbs
features	35mm pole mount/multipurpose rigging fittings
options	mounting frame / multipurpose flyware / black HD cover, finish available in 200 RAL colors

Technical Specifications

frequency response	68 - 19,000Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	131dB / 136dB peak
dispersion angle (horiz. x vertical in degrees)	HDSP® asymm. 60 - 120 x 35 -5 dgr. tilt
integrated amplifier / system controller type	Class D fullbridge, FET-amp / FIRTEC® DSP
transducers	10" ND cone + 1.4" ND compression driver
power rms/peak in Watts (AES standard)	500 + 100 / 2kW (sineburst: 800+200W)
amplification / x-over	2-way bi-amp / 1,200Hz phase linear FIR
input signal	automatic detection analog or digital AES/EBU XLR3
input connectors	XLR3 / powerCON inlet (117/230VAC)
output connectors	XLR3 - thru / powerCON outlet
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	52 x 30 x 35 cm 20.4" x 11.7" x 13.8"
weight (without options)	22 kg 48 lbs
features	ethernet in/out, remote controlled integrated digital delay with display 35mm pole mount / multipurpose rigging fittings, self regulating power supply
options	mounting frame, multipurpose flyware, black HD cover, finish available in 200 RAL colors

CPD 12 POWERED

HDSP® inside FIRTEC® inside

The CPD 12 complements the KS AUDIO CPD-Series of DSP controlled active self-powered systems with the unique directivity of HDSP® technology, resulting in the highest sound pressure level even in the lower frequency ranges while simultaneously having the lightest weight possible. The DSP-Controller works with KS AUDIO FIR-Filter technology for true impulse-correct reproduction of audio. There are two-integrated amplifiers – 800W RMS for the 12" woofer and 200W RMS for the 1.4" tweeter – with a peak performance of 2,000W!

The unique sound dispersion design of the HDSP mid/high frequency horn and its electronic blending with the bass/midrange driver is unique. The HDSP® DESIGN results in the multiple integrated dispersion angles that widen downwards towards the near field of the speaker while maintaining tight pattern control and long throw capability. The vertical bending of the HF wave front continues through the cut-off frequency as well as the crossover frequency, without any variance in the frequency response. This means that with a standard two-speaker setup, the audience in close proximity to the speakers will enjoy the same audio quality and definition as those further away.

The electronics are comprised of a switch mode power supply with Power-factor-Correction, a "cold" PWM amplifier for bass/midrange performance, and an analog FET-amplifier with the best audio characteristics for the mid-high compression driver. Both the 12" Long throw woofer and the 1.4 compression driver have strong but light neodymium magnets. The 3" membrane of the compression driver consists of a special aluminum alloy that has a clearly reduced distortion factor in comparison to a titanium membrane.

With the CPD 12, KS AUDIO has responded to the demanding needs of the professional operator with a universal self-powered loudspeaker producing the highest audio quality in a compact size. There are many applications in which the CPD 12 can be used: Theatre, Live-stage Music, in large rooms or tents, as a delay system for far away areas, or as a compact middle-high frequency system in combination with the CPD W1, CPD W2, or CPD WL subwoofers.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. Another special feature is the two multipurpose fittings on the back of the speaker, allowing the installation of different fly-ware and connectors, which are safely interlocked by means of quick release push-pins. There is a pole mount in the bottom of the cabinet and a protective steel grill on the front, with or without acoustic foam, are further features of this high-quality product.

The rear mounted 2-way FIR CONTROL® DSP amplifier operates very efficiently without the need of a cooling fan. The FIR crossover and filter are specially matched to the drivers, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. The control panel also has a digital volume control to individually adjust for each venue and a digital delay reaching up to 48 m for decentralized PA systems. There is a Lo Cut switch for speech reproduction or for adding a subwoofer to the system. Operation and set-up with a PC using the KS AUDIO REMOTE 3 Software is also possible over an Ethernet connection.

The CPD 12 operates on all AC 110-240V electrical supply. The starting current is electronically limited. There are two PowerCON F+M connectors which allow you to link additional KS AUDIO line of CPD products, such as a CPD subwoofer.

C 12 UNPOWERED

Same as CPD 12 but unpowered.

Technical Specifications	C 12 unpowered
frequency response	58 - 19,0 00Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	133dB / 139dB peak
dispersion angle (horiz. x vertical in degrees)	HDSP asymm. 60 - 120 x 35 - 5 dgr tilt
recom. amplifier / system controller type	KS CA 4D or TA 4D / D MOD® or FIRMOD2®
transducers	12" ND cone + 1.4" ND compression driver
power rms / peak in Watts (AES standard)	700 + 100 / 1,400 + 200
amplification / x-over	2-way bi-amp or full-range (switchable) 1,200Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	58 x 35 x 41 cm 22.6" x 13.7" x 16.2"
weight (without options)	21 kg 46 lbs
features	35 mm pole mount, 4 x M6 mounting points
options	mounting frame, multi purpose flyware, black HD cover, finish available in 200 RAL colors

Technical Specifications	CPD 12 powered
frequency response	58 - 19,000Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	131dB / 136dB peak
dispersion angle (horiz. x vertical in degrees)	HDSP asymm. 60 - 120 x 35 - 5 dgr tilt
integrated amplifier / system controller type	Class D fully bridged, FET amp, FIRTEC® DSP
transducers	12" ND cone + 1.4" ND compression driver
power rms/peak in Watts (AES standard)	500 + 100 / 2,000 (sineburst 800+200W)
amplification / x-over	2-way bi-amp 1,200Hz phase linear FIR
input connectors	automatic detection analog or digital AES/EBU XLR3
input signal	XLR3 / powerCON inlet 117/230 VAC
output connectors	XLR3 thru
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	58 x 35 x 41 cm 22.6" x 13.7" x 16.2"
weight (without options)	25 kg 55 lbs
features	ethernet in/out, integrated digital delay with display, 35mm pole mount, 4 x M6 mounting points, powerCON connector , self regulating power supply
options	mounting frame, black HD cover, finish available in 200 RAL colors

Stadiums Germany Rhein Stadium, Düsseldorf Mecdes Benz
Olympic Stadium, Berlin Mainz 05 S

FIRTEC® inside

CPD 1214 POWERED COAXIAL

The CPD 1214 completes the KD AUDIO CPD-Series active self-powered System with an excellent horn loaded-system. Due to its horn loaded coaxial arrangement of the low-mid chassis and mid-high driver the directivity is well balanced for long throw applications.

The DSP Controller works with KS AUDIO FIRTEC® DSP technology for true impulse-correct reproduction of audio and increased resistance to feedback resulting in a beyond expected sound pressure level that guarantees a natural audibility. Two integrated amplifiers supply 500W for the 12" woofer and 100W for the 1.4" tweeter - with a peak performance of 1,200W !

The electronics are comprised of a switch mode power supply with Power-factor-Correction, a "cold" PWM amplifier for bass/midrange performance, and an analog FET-amplifier with the best audio characteristics for the mid-high compression driver. Both the 12" woofer and the 1.4" compression driver have strong but light neodymium magnets. The 3" membrane of the compression driver consist of a special aluminum alloy that has a clearly reduced distortion factor in comparison to a titanium membrane.

With the CPD 1214, KS AUDIO has responded to the demanding needs of the professional operator with a universal, self-powered loudspeaker with the highest audio quality in a compact size.

There are many applications in which the CPD 1214 can be used: Theatre, Live-stage Music, in large rooms or tents, as a delay system for far away areas, or as a compact middle-high tone system in combination with one of the many KS AUDIO subwoofers, we recommend the CPD WL subwoofer.

The CPD 1214 is equally suited for standard stacking, as well as flying-assemblies with the integrated RIG C flying-system. The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. Four sturdy wheels, handles, and a protective steel grill, with or without acoustic foam, are further features of this high-quality product.

The rear mounted 2-way FIRTEC® DSP amplifier operates very efficiently without the need of a cooling fan. The FIR crossover and filter are specially matched to the drivers, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. The control panel also has a digital volume control to individually adjust for each venue and a digital delay up to 140ms or 40m (120ft), for time alignment and decentralized PA systems.

Furthermore, adjustments can also be made over Ethernet via the KS AUDIO REMOTE 3 software. All adjustments will be displayed on a brightly lit display in an easy to read format.

The CPD 1214 operates on all AC 110-240V electrical supply. The starting current is electronically limited. There are two PowerCON F+M connectors that allows you to link additional KS AUDIO line of CPD products, such as a CPD SUB or the CPD WL subwoofer.

C 1214 UNPOWERED COAXIAL

Same as CPD 1214 but unpowered.

Technical Specifications

frequency response	75 / 120 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	131dB / 136dB peak
dispersion angle (horiz. x vertical in degrees)	60 x 40
recom. amplifier / system controller type	KS CA 4D or TA 4D / D MOD® or FIRMOD2®
transducers	12" ND cone + 1.4" ND compression driver
power rms / peak in Watts (AES standard)	500 + 100 / 1,000 + 200
amplification / x-over	bi-amp or full-range mode (switchable)/1,200Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	52 x 30 x 33 cm 20.4" x 11.7" x 12.9"
weight (without options)	15 kg 33 lbs
features	35mm pole mount, multipurpose rigging fittings
options	mounting frame, multipurpose flyware, black HD cover, finish available in 200 RAL colors

Technical Specifications

frequency response	75 / 120 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	131dB / 136dB peak
dispersion angle (horiz. x vertical in degrees)	60 x 40
integrated amplifier / system controller type	PWM fully bridged, FET-amp, FIRTEC®, DSP
transducers	12" ND cone + 1.4" ND compression driver
power rms/peak in Watts (AES standard)	500 + 100 / 1,000 + 200
amplification / x-over	2-way bi-amp / 1,200Hz phase linear FIR
input signal	automatic detection analog or digital AES/EBU
input connectors	XLR3 XLR3 / powerCON inlet (117/230VAC)
output connectors	XLR3 - thru / powerCON outlet
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	58 x 58 x 66 cm 22.6" x 22.6" x 25.9"
weight (without options)	45 kg 99 lbs
features	ethernet in/out, remote controlled, integrated digital delay with display, integrated C-RIG flyware, self regulating power supply
options	C-RIG flyware, multipurpose flyware, black HD cover, finish available in 200 RAL colors

z Stadium, Stuttgart Wedau Stadium, Duisburg Westfalen Stadium, Dortmund
tadium, Mainz Jahn Stadium, Berlin

T4 UNPOWERED

The T4 is the first choice when it comes to German Opera and Play Houses.

The T4 is the compact 2-way system with the highest level of performance, sound pressure levels, and audio quality. It's loading capacity extends down to the lowest frequencies and the FIR steering of the 2" driver is unmatched in the industry in regards to the lowest distortion and absolute phase linearity.

With the 12"- long excursion woofer that can handle 700W and a 2" driver that can handle 140W the T4 gives you long endurance- with a peak overall power handling of 2,000W. The sound dispersion in the mid / hi horn is completely even across the audio spectrum and the HF wave front continues thru the cut-off frequency as well as the crossover frequency, without any variance in the frequency response.

Both the 12" Long excursion woofer and the 2" compression driver have strong but light neodymium magnets. The 4" membrane of the compression driver consists of a special aluminum alloy that has a clearly reduced distortion factor in comparison to a titanium membrane.

With the T4, KS AUDIO has responded to the demanding needs of the professional operator with a universally usable 2-way sound system with the highest audio quality, yet in a compact size.

There are many applications in which the T4 can be used: Theatre, Live-stage Music, in large rooms or tents, as a delay system for far away areas, or as a compact middle-high frequency system in combination with one of the many KS AUDIO subwoofers, we recommend the T4 W sub. The 12" long excursion neodymium woofer with a 4 inch voice coil and the 2" neodymium driver with a 4" membrane will spoil you with it's even and smooth dispersion characteristics.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating.

Two different horizontal dispersion patterns (60x40 or 90x40) are available. Another special feature is the two Aeroquip fittings on the speaker. Allowing the installation of different fly-ware and connectors, which are safely interlocked. There is a pole mount in the bottom of the cabinet and a protective steel grill on the front, with or without acoustic foam, and handles on the top and sides are further features of this high-quality product.

Please note, all specifications are only achieved using KS AUDIO amplifiers and controllers.

Technical Specifications	T4 unpowered
frequency response	50 - 19,000Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	133dB / 136dB peak
dispersion angle (horizontal x vertical in degrees)	60 x 40 or 90 x 40
recommended amplifier / system controller type	TA 4D / D MOD® or FIRMOD2®
transducers	1 x 12" ND cone + 2" ND driver on CD horn
power rms / peak in Watts (AES standard)	700 + 140 / 1,400 + 280
amplification / x-over	bi-amp / 1,000Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	60 x 38 x 44 23.5" x 14.9" x 17.3"
weight (without options)	27 kg 59 lbs
features	35mm pole mount, 4 x M10 mounting points
	AeroQuip flyware
options	mounting frame, black HD cover,
	finish available in 200 RAL colors

Foreigner
Tour in Germany

TOTO
Tour in Germany

Al Jarreau
Frankfurt, Germany

BB King
Tour in Germany

CPD 15 POWERED

FIRTEC® inside

KS AUDIO presents an improvement of – Audio Over Ethernet – direct from your console or PC and into the powered loudspeaker!

For years audio-engineers have looked for a better solution of how to send real-time audio over a network. In a large fixed-installation system it is normal to use an audio network. However, correct set up of the system takes experience, and in the often very short set-up times of touring a mistake free set-up is nearly impossible, especially in theaters, opera houses and live sound stages, where constant modification and adjustment, grounding issues, lighting dimmers, and questionable cables make a standard setup impossible. However, it does not need to be so complicated:

You can install a network with quality off the shelf components. On your Menu your active loudspeakers will be given a channel number, and you assign your PC or digital mixer transmits the output signals on these channels. You can set-up your loudspeaker anywhere in your network and always have it immediately on the same output. No need for searching, new patches, or diagrams for the next build-up, and no disturbances in the network audio signal. Installation of audio over a data network can not be easier, it truly becomes plug and play…, with 16 audio channels on one cable, it saves setup time and significantly reduces system costs as Ethernet cables and connectors are much less expensive than standard analog multi core cables and connectors.

If you want to continue to work with your current console, and it has no direct network access, KS AUDIO offers a 19″/single rack space module that converts any ADAT signal into a compatible network audio signal. Furthermore, every cabinet can be assigned an adjustable IP address, and over the same network all functions of the system can be monitored and controlled with the KS AUDIO PC REMOTE 3 software.

Every component in the system also has the latest technology: neodymium magnets, a wide-range switch mode power supply with PFC, PWM, and FET amplifiers, as well as digital signal processing with FIR filters. With the CPD 15, KS AUDIO has responded to the demanding needs of the professional operator with a universal self-powered loudspeaker with the highest audio quality in a compact size. There are many applications in which the CPD 15 can be used: Theatre, Live-stage Music, in large rooms or tents, as a delay system for far away areas, and last but not least as a compact middle-high tone system in combination with the CPD W15, the CPD SUB or CPD WL powered subwoofers.

The CPD 15 is equipped with a 700 W RMS 12″ ND low-middle frequency long excursion driver, a 2″ neodymium driver with a 4″ membrane made of a special light-metal alloy, and a CD-Horn with exceedingly precise directivity. The electronically balanced analog and AES/EBU inputs are in the form of XLR F+M connectors, with an active output.

The unit is operated through a menu, using a digital rotary knob, and an LCD graphic display. All adjusted levels, filters, and delay-settings are permanently saved. The rear mounted, separately housed, 2-way PWM + MOSFET Controller amplifier operates without the need of a cooling fan thus avoiding the typical fan noise found in most self powered systems.

The speaker box construction is, like all KS AUDIO systems, built from birch plywood with a polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. and premium solid wood sides are also available. Incorporated hand-holds, a pole mount, M10 threaded rigging points, and AeroQuip rails that double as carrying handles, as well as a protective steel grill, with or without acoustic foam, are all further features of this high-quality product.

Technical Specifications

	CPD 15 powered
frequency response	55 - 20,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	134dB / 140dBpeak
dispersion angle (horizontal x vertical in degrees)	60 x 40 or 90 x 40 or 60 x 60
integrated amplifier / system controller type	PFC-SMPS, PWM + Mosfet / 32-bit FIRTEC® DSP FIRTEC®
transducers	1 x 12″ ND cone + 1 x 2″ compression driver on a CD horn
power rms/peak in Watts (AES standard)	700 + 120 / 1,400 + 240
amplification / x-over	bi-amp / 1,000Hz
input signal	automatic detection analog or digital AES/EBU XLR3
input connectors	XLR3 / XLR3 AES-EBU powerCON inlet (117-230VAC)
output connectors	XLR3 - thru / XLR3 AES-EBU powerCON outlet
cabinet	birch plywood
grill	perforated RVS + acoustic foam (in or outside)
finish	charcoal polyurethane
dimensions (height x width x depth)	60 x 38 x 48 cm 23.5″ x 14.9″ x 18.8″
weight (without options)	30 kg 66 lbs
features	ethernet in/out, remote controlled and digital audio input (ADAT 24bit 48Khz), 35mm pole mount, 4 x M10 mounting points, AeroQuip flyware, self regulating power supply
options	mounting frame, black HD cover, finish available in 200 RAL colors

FIR CONTROL® inside

CPD B POWERED

Active Stereo / Mono Subwoofer

The CW 210 and CPD B have much to offer to both the demanding amateur as well as the professional operator as a high quality universally applicable mono-subwoofer. The new cube form is more powerful and more compact than previous versions. Following years of experience with the successful CPA SUB-series KS AUDIO has improved upon the design, audio quality and ease of handling.

With the CW 210 and CPD B models KS AUDIO focused on those customers that wanted a smaller but economical subwoofer solution. There are many applications in which the CW 210 or CPD B can be used: Center-Bass for multi-media surround sound, a small live stage, the bar in a hotel, and last but not least as a powerful lower range extension that is nearly invisible.

The CW 210 / CPD B is made up of two 400Wrms 10" long throw drivers with an exceptionally long linear excursion of 26mm. Through its unique construction with double-magnets and a push/pull arrangement this small box can, for its size, generate unbelievably deep bass sound pressure.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. Handholds, an M20 pole mount, and protective grill, with or without acoustic foam, are further features of this high-quality product.

The rear mounted 2-way FIR CONTROL® DSP, 800Wrms PWM amplifier of the CPD B operates very efficiently without the need of a – sometimes distractingly loud - cooling fan. The FIR crossover and filter are specially matched to the drivers, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. In addition to the power switch, the control panel also has a selectable digital volume / delay control to individually adjust for each venue and offers a digital delay reaching up to 40 m for decentralized PA systems.

The CPD B creates out of the bass frequencies of the left and right channel, a summed, loss-free and a highly efficient mono signal. With 2-Channel redundancy, the volume control allows for adjustment with a range of +/-9dB. Another special feature is the DSP Controller with its integrated delay. Which allows on-site adjustment, or the creation of a focused directivity bass-array without any additional equipment. The limiter prevents overloading, provides for frequency response correction, and has a subsonic-filter.

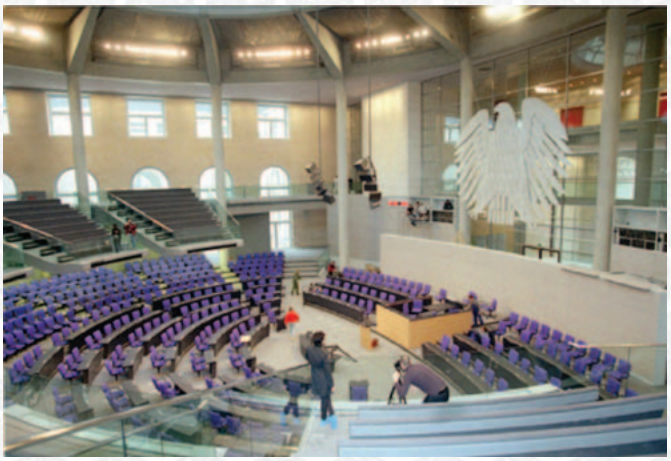
CW 210 UNPOWERED

Same as CPD B but unpowered.

Technical Specifications	CW 210 unpowered
frequency response	48 - 110Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	126dB / 130dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
recommended amplifier / system controller type	KS CA 4D, TA 4D or TA 2D/ D MOD® or FIRMOD2®
transducers	2 x 10" 26mm extreme excursion cone
power rms / peak in Watts (AES standard)	800 / 1,600
amplification / x-over	bridge mode, hi-cut 120 Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	46 x 47 x 44 18" x 18.4" x 17.3"
weight (without options)	26 kg 57 lbs
features	M20 pole mount
options	black HD cover, finish available in 200 RAL colors

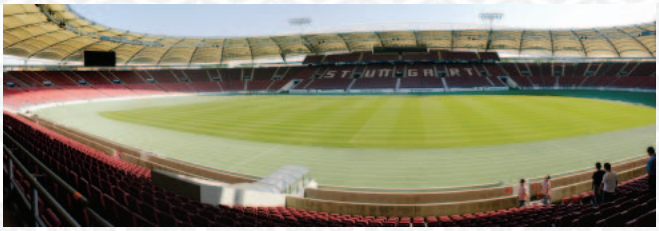
Technical Specifications	CPD B powered
frequency response	48 - 110Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	126dB / 130dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
integrated amplifier / system controller type	bridged PWM / FIR CONTROL®
transducers	2 x 10" 26mm extreme excursion cone
power rms/peak in Watts (AES standard)	800 / 1,600
amplification / x-over	bridge mode / hi-cut 120Hz
input connectors	L+R XLR3 / powerCON inlet
output connectors	L+R XLR3
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	46 x 47 x 44 cm 18" x 18.4" x 17.3"
weight (without options)	30 kg 66 lbs
features	integrated digital delay with display, M20 pole mount
options	black HD cover, finish available in 200 RAL colors

REFERENCES



"Reichstag" German Congress
Berlin, Germany

Chirstina Aquilera & Mercedes Benz
Munich, Germany



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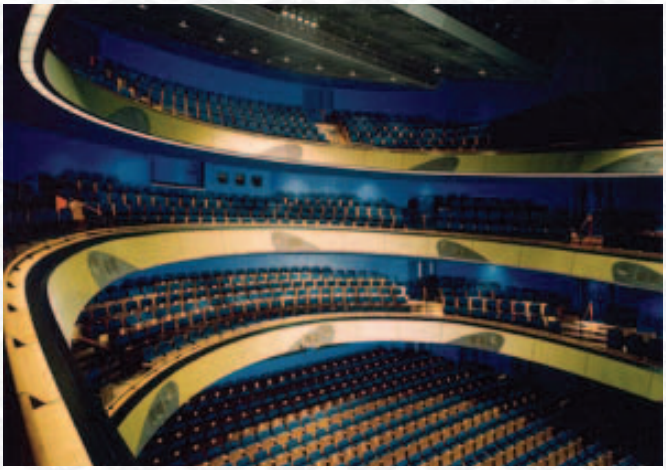
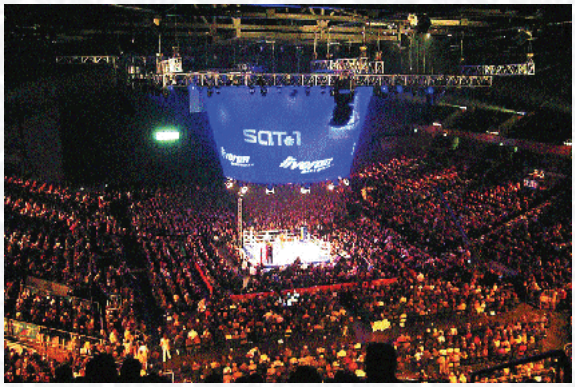
Stuttgart, Germany



Opera
Frankfurt, Germany



Boxing World Championship
Duisburg, Germany

JAY-Z
Tour, Germany

FIR CONTROL® inside

CPD W1 POWERED

In spite of its small stature, the C W1 and CPD W1 delivers a very deep, powerful yet clean, and dry sound. The speaker cabinet is a classic-reflex design - 1x15" and has performance of the highest quality. The CPD W1 is driven by a 700Wrms PWM amplifier.

What makes the C W1 / CPD W1 unique is the highly durable long throw driver with a 100 mm voice coil and reinforced cone, plus a directivity for frequencies in the range of 40Hz: the 2 bass reflex openings have a large exponential cross-sectional contour that has particularly high efficiency and minimal distortion through minor losses at the tunnel openings. The small sizes of the C W1 and CPD W1 make them especially useful for venues where little space on the stage is available, or where it must be integrated into a stage-portal. With an M20 threaded pole mount, the C W1 / CPD W1 become an ideal stand base for many of the KS AUDIO CPD mid/hi cabinets, we recommend 2 of the CW 1 / CPD W1 to bring the tops boxes CPD 10 / CPD 12 to the ideal height for the audience.

The CPD W1 creates out of the bass frequencies of the left and right channel, a summed, loss-free and highly efficient mono signal.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. Handholds, an M20 pole mount, and protective grill, with or without acoustic foam, are further features of this high-quality product.

The rear mounted FIR CONTROL® DSP / PWM amplifier of the CPD W1 operates very efficiently without the need of a – sometimes distractingly loud - cooling fan. The FIR crossover and filter is specially matched to the driver, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. In addition to the power switch, the control panel also has a selectable digital volume / delay control to individually adjust for each venue and offers a digital delay reaching up to 40 m (120ft) for decentralized PA systems.

With a 2-channel redundancy, the volume control allows for adjustment with a range of +/-9dB. Another special feature is the DSP Controller with its integrated delay. Which allows on-site adjustment, or the creation of a focused directivity bass-array without any additional equipment. The limiter prevents overloading and provides for frequency response correction. All functions of the DSP controllers can be adjusted and controlled over the Ethernet network. The most important parameters are presented on an LED display and can be adjusted directly on the unit.

C W1 UNPOWERED

Same as CPD W1 but unpowered.

Technical Specifications

	C W1 unpowered
frequency response	38 - 120Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	126dB / 132dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
recommended amplifier / system controller type	KS CA 4D, TA 2D or TA 4D / D MOD® or FIRMOD2®
transducer	15" 100mm long excursion cone . 4" voice coil
power rms / peak in Watts (AES standard)	700 / 1,400Wpeak
amplification / x-over	woofer mode / 120Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	58 x 44 x 58 cm 22.8" x 17.3" x 22.8"
weight (without options)	28 kg 62 lbs
features	M20 pole mount
options	black HD cover, frontcover with wheels, finish available in 200 RAL colors

Technical Specifications

	CPD W1 powered
frequency response	38 - 120Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	126dB / 132dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
integrated amplifier / system controller type	bridging mode PWM / FIR CONTROL®
transducers	15" 100mm long excursion cone
power rms/peak in Watts (AES standard)	700 / 1,400
amplification / x-over	woofer mode / lo-cut 120Hz
input signal	automatic detection analog or digital AES/EBU XLR3
input connectors	XLR3 / powerCON inlet (117/230VAC)
output connectors	XLR3 - thru / powerCON outlet
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	58 x 44 x 58 cm 22.8" x 17.3" x 22.8"
weight (without options)	31 kg 68 lbs
features	ethernet in/out, remote controlled, integrated digital delay with display, M20 pole mount, self regulating power supply
options	black HD cover, frontcover with wheels, finish available in 200 RAL colors

"Semper"Opera
Dresden, Germany

FIR CONTROL® inside

CPD W2 POWERED

In spite of its small stature, the C W2 and CPD W2 delivers a very deep, powerful yet clean, and dry sound. The speaker cabinet is a classic-reflex design - 2 x 15" the CPD W2 is driven by a 1,400Wrms PWM amplifier and they both have the performance of the highest quality. What makes the C W2 / CPD W2 unique is the highly durable long throw driver with a 100 mm voice coil and reinforced cone, plus a directivity for frequencies in the range of 40Hz: the 2 bass reflex openings have a large exponential cross-sectional contour that has particularly high efficiency and minimal distortion through minor losses at the tunnel openings.

The C W2 / CPD W2's small size makes it especially useful for venues where little space on the stage is available, or where it must be integrated into a stage-portal. With an M20 threaded pole mount, the C W2 / CPD W2 become an ideal stand base for many of the KS AUDIO CPD mid/hi cabinets. We recommend 2 of the C W2 / CPD W2 to bring the tops boxes CPD 10 / CPD 12 to the ideal height for the audience.

The CPD W2 creates out of the bass frequencies of the left and right channel, a summed, loss-free and highly efficient mono signal.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating. At your request he finish available can be changed to any desired color from the RAL color charts. Handholds, an M20 pole mount, and protective grill, with or without acoustic foam, are further features of this high-quality product.

The rear mounted FIR CONTROL® DSP / PWM amplifier of the CPD W2 operates very efficiently without the need of a – sometimes distractingly loud - cooling fan. The FIR crossover and filter is specially matched to the driver, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. In addition to the power switch, the control panel also has a selectable digital volume / delay control to individually adjust for each venue and offers a digital delay reaching up to 40 m (120ft) for decentralized PA systems.

With a 2-channel redundancy, the volume control allows for adjustment with a range of +/-9dB. Another special feature is the DSP Controller with its integrated delay. Which allows on-site adjustment, or the creation of a focused directivity bass-array without any additional equipment. The limiter prevents overloading and provides for frequency response correction. All functions of the DSP controllers can be adjusted and controlled over the Ethernet network. The most important parameters are presented on an LED display and can be adjusted directly on the unit.

C W2 UNPOWERED

Same as CPD W2 but unpowered.

Technical Specifications

	C W2 unpowered
frequency response	38 - 120Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	130dB / 136dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
recommended amplifier / system controller type	KS CA 4D, TA 2D or TA 4D / D MOD® or FIRMOD2®
transducer	2 x 15" long excursion cone , 4" voice coil
power rms / peak in Watts (AES standard)	1,400 / 2,800 Wpeak
amplification / x-over	woofer mode / 120Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	82 x 44 x 66 cm 32.2" x 17.3" x 25.9"
weight (without options)	61 kg 125 lbs
features	M20 pole mount , wheels
options	black HD cover, frontcover, finish available in 200 RAL colors

Technical Specifications

	CPD W2 powered
frequency response	38 - 120Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	130dB / 136dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
integrated amplifier / system controller type	bridging mode PWM / FIR CONTROL®
transducers	2 x 15" long excursion cone
power rms/peak in Watts (AES standard)	1,400 / 2,800
amplification / x-over	woofer mode / lo-cut 120Hz
input signal	automatic detection analog or digital AES/EBU XLR3
input connectors	XLR3 / powerCON inlet (117/230VAC)
output connectors	XLR3 - thru / powerCON outlet
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	82 x 44 x 66 cm 32.2" x 17.3" x 25.9"
weight (without options)	61 kg 134 lbs
features	ethernet in/out, remote controlled, integrated digital delay with display, M20 pole mount, wheels, self regulating power supply
options	black HD cover, frontcover, finish available in 200 RAL colors

FIRTEC® inside

CPD W15 POWERED

In spite of its small stature, the CPD W15 delivers a very deep, powerful yet clean, and dry sound. The speaker cabinet is a classic-reflex design - 2 x 15" – driven by a 1,200Wrms PWM amplifier and has performance of the highest quality. What makes the CPD W15 unique is the highly durable long throw driver with a 100 mm voice coil and reinforced cone, plus a directivity for frequencies in the range of 40Hz: the two bass reflex openings have a large exponential cross-sectional contour that has particularly high efficiency and minimal distortion through minor losses at the tunnel openings. Following years of experience with the successful CPA SUB the biggest focus was on high transmission-quality, ease of use and handling together with a functional design.

The CPD W15's small size makes it especially useful for venues where little space on the stage is available, or where it must be integrated into a stage-portal. With an M20 threaded pole mount, the CPD W15 becomes an ideal stand base for many of the KS AUDIO CPD mid/hi cabinets. When used as a low frequency extension in combination with the CPD 15 it brings the CPD 15 to the ideal height.
Once more KS AUDIO presents an improvement of – Audio Over Ethernet – direct from your console or PC and into the active loudspeaker! For years audio-engineers have looked for a better solution of how to send real-time audio over a network. In a large fixed-installation system it is normal to use an audio network. However, correct set up of the system takes experience, and in the often very short set-up times of touring a mistake free set-up is nearly impossible, especially in theaters, opera houses and live sound stages, where constant modification and adjustment, grounding issues, lighting dimmers, and questionable cables make a standard setup impossible. However, it does not need to be so complicated: You can install a network with quality off the shelf components. On your menu your active loudspeakers will be given a channel number, and you assign your PC or digital mixer to transmit the output signals on these channels. You can set-up your loudspeaker anywhere in your network and always have it immediately on the same output.

No need for searching, new patches, or diagrams for the next build-up, and no disturbances in the network audio signal. Installation of audio over a data network can not be easier, it truly becomes plug and play…, with 16 audio channels on one cable, it saves setup time and significantly reduces system costs as Ethernet cables and connectors are much less expensive than standard analog multi core cables and connectors. If you want to continue to work with your current console, and it has no direct network access, KS AUDIO offers A 19"/single rack space module that converts any ADAT signal into a compatible network audio signal. Furthermore, every loudspeaker can be assigned an adjustable IP address, and over the same network all functions of the system can be monitored and controlled with the PC REMOTE 3 software.

Every component in the system also has the latest technology: neodymium magnets, a wide-range switch mode power supply with PFC, PWM, and FET amplifiers, as well as digital signal processing with FIR filters.
The electronically balanced analog and AES/EBU inputs are in the form of XLR F+M connectors, with an active output. The unit is operated through a menu, using a digital rotary knob, and an LCD graphic display. All adjusted levels, filters, and delay-settings are permanently saved. The rear mounted, separately housed, PWM Controller /amplifier operates without the need of a cooling fan thus avoiding the typical fan noise found in most self powered systems.The speaker box construction is, like all KS AUDIO systems, built from birch plywood with a polyurethane coating.

T4 W UNPOWERED

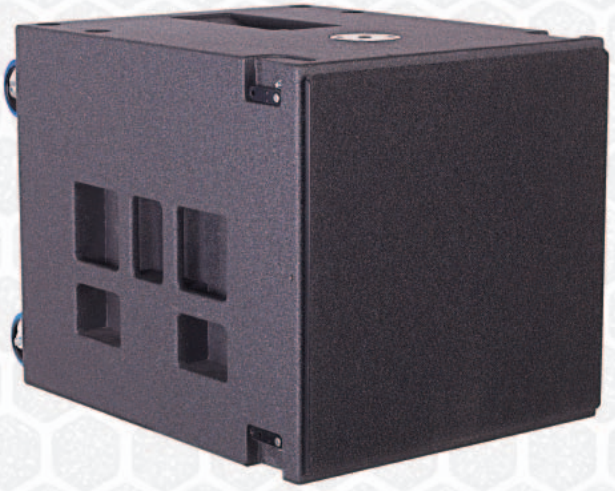
Same as CPD W15 but unpowered.

Technical Specifications

	T4 W unpowered
frequency response	38 - 140Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	130dB / 136dBpeak
dispersion angle (horizontal x vertical in degrees)	omni directional
recommended amplifier / system controller type	TA 2D or TA 4D / D MOD® or FIRMOD2®
transducers	2 x 15" 100mm long excursion, 4" voice coil
power rms / peak in Watts (AES standard)	1,400 / 2,800
amplification / x-over	woofer mode / hi-cut 70 or 140Hz (switchable)
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	82 x 44 x 66 cm 32.2" x 17.3 " x 25.9"
weight (without options)	55 kg 121 lbs
features	M20 pole mount / wheels
options	black HD cover, finish available in 200 RAL colors

Technical Specifications

	CPD W15 powered
frequency response	38 - 140Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	130dB / 136dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
integrated amplifier / system controller type	bridging mode class D / 32-bit FIRTEC® DSP
transducers	2 x 15" 110mm long excursion + 4" voice coil
power rms/peak in Watts (AES standard)	1,200 / 2,400
amplification / x-over	woofer mode / hi-cut 70 or 140 Hz (switchable)
input signal	automatic detection analog or digital AES/EBU XLR3
input connectors	XLR3 / XLR3 AES-EBU / powerCON inlet (117-230VAC)
output connectors	XLR3 - thru / XLR3 AES-EBU / powerCON outlet
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	82 x 44 x 66 cm 32.2" x 17.3" x 25.9"
weight (without options)	66 kg 145 lbs
features	ethernet in/out, remote controlled and digital audio input (ADAT 24bit, 48kHz), M20 pole mount , wheels, self regulating power supply
options	black HD cover, finish available in 200 RAL colors



Palm Coast Praise Church
Bunnell, Florida, USA

FIR CONTROL® inside

CPD WL POWERED

In spite of its small stature, the CPD WL delivers a very deep, powerful yet clean, and dry sound. The speaker cabinet is a classic-reflex design - 1 x 18" – driven by a 900Wrms PWM amplifier and has performance of the highest quality. What makes the CPD WL unique is the highly durable long throw driver with a 114 mm voice coil and reinforced cone, plus a directivity for frequencies in the range of 40Hz: the 2 bass reflex openings have a large exponential cross-sectional contour that has particularly high efficiency and minimal distortion through minor losses at the tunnel openings.

The CPD WL's small size makes it especially qualified for venues where little space on the stage is available, specifically in combination with a C or CPD LINE ARRAY where the subwoofers need to be flown. Integrated C RIG fly ware allows secure stacking and rigging with several KS CPD speaker systems. Three CPD WL subs stacked upon one another provide the correct height level for the CPD 1214 or a CPD LINE ground stack. The CPD WL creates out of the bass frequencies of the left and right channel, a summed, loss-free and highly efficient mono signal.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored Polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. C RIG fly ware, Handholds, an M20 pole mount, and protective grill, with or without acoustic foam, and four stable wheels on the backside, are further features of this high-quality product. A protective transport cover is also available.

The rear mounted FIR CONTROL® DSP / PWM amplifier operates very efficiently without the need of a sometimes distractingly loud - cooling fan. The FIR crossover and filter is specially matched to the driver, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. In addition to the power switch, the control panel also has a selectable digital volume / delay control to individually adjust for each venue and offers a digital delay reaching up to 40 m (120ft) for decentralized PA systems.

With a 2-channel redundancy, the volume control allows for adjustment with a range of +/-9dB. Another special feature is the DSP Controller with its integrated Delay. Which allows on-site adjustment, or the creation of a focused directivity aass-array without any additional equipment. The limiter prevents overloading and provides for frequency response correction.
All functions of the DSP controllers can be adjusted and controlled over the Ethernet network. The most important parameters are presented on an LED display and can be adjusted directly on the unit.

The sturdy protective grill covers the entire front and can also be covered in "invisible" acoustic foam. A protective transport cover is also available.

C WL UNPOWERED

Same as CPD WL but unpowered.

Technical Specifications

	C WL unpowered
frequency response	38 -120Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	127dB / 133dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
recommended amplifier / system controller type	KS TA 2D or TA 4D / D MOD® or FIRMOD2®
transducer	18" cone, 4.5" voice coil, 114 mm long excursion
power rms / peak in Watts (AES standard)	900 / 1,800
amplification / x-over	woofer mode / high cut 120Hz
input connectors	Speakon NL4
output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside or outside)
finish	charcoal polyurethane
dimensions (height x width x depth)	58 x 58 x 72 cm 22.6" x 22.6" x 28.3"
weight (without options)	49 kg 108 lbs
features	integrated C-RIG flyware , M20 pole mount, wheels
options	C-RIG cradle, frontcover (only with inside foam), black HD cover, finish available in 200 RAL colors

Technical Specifications

	CPD WL powered
frequency response	38 - 120Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	127dB / 133dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
integrated amplifier / system controller type	PWM fully bridged / FIR CONTROL® DSP
transducers	18" cone , 4.5" voice coil, 114 mm long excursion
power rms/peak in Watts (AES standard)	900 / 1,800
amplification / x-over	woofer mode / hi-cut 120Hz
input signal	automatic detection analog or digital AES/EBU XLR3
input connectors	XLR3 / powerCON inlet (117/230VAC)
output connectors	XLR3 - thru / powerCON outlet
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside or outside)
finish	charcoal polyurethane
dimensions (height x width x depth)	58 x 58 x 72 cm 22.6 " x 22.6" x 28.3"
weight (without options)	57 kg 125 lbs
features	ethernet in/out, remote rontrolled, integrated digital delay with display, integrated C-RIG flyware, M20 pole mount, self regulating power supply
options	C-RIG cradle, black HD cover, frontcover (only with inside foam), finish available in 200 RAL colors

FIR CONTROL® inside

CPD SUB POWERED

The C SUB and CPD SUB produces the frequencies that your ears expect in large spaces: Not only at 80Hz with a 4m wavelength, but also one octave deeper while retaining constant and efficient upper low frequencies.

As with all KS AUDIO loudspeakers, the C SUB and CPD SUB has a high audio-quality that is not compromised by its power. This is achieved by the use of four highly resilient 10" long-throw low frequency driver each with a 30 mm voice-coil. The relatively small moving mass of the coated membranes in connection with push-pull technology produces a precise in-and out transient response.

The drivers are paired in two separate, specially engineered enclosures with exact acoustically tuned properties. This minimizes any possible distortion. The speaker cabinet itself has very little vibration due to its strategically reinforced plywood construction.

The CPD SUB creates out of the bass frequencies of the left and right channel, a summed, loss-free and high efficient mono signal.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. Handholds, an M20 pole mount, and protective grill, with or without acoustic foam, are further features of this high-quality product.

The rear mounted FIR CONTROL® DSP / PWM amplifier of the CPD SUB operates very efficiently without the need of a – sometimes distractingly loud - cooling fan. The FIR crossover and filter are specially matched to the drivers, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input are in the form of XLR F+M connectors. In addition to the power switch, the control panel also has a selectable digital volume / delay control to individually adjust for each venue and offers a digital delay reaching up to 40m (120 ft) for decentralized PA systems.

As a mono signal system the volume control allows for adjustment with a range of +/-9dB. Another special feature is the DSP Controller with its integrated delay which allows on-site adjustment, or the creation of a focused directivity bass-array without any additional equipment.

The limiter prevents overloading, provides for frequency response correction, and has a subsonic-filter. The integrated PMW amplifier and DSP controller can be remotely controlled with an Ethernet connection and KS AUDIO Remote 3 software.

C SUB UNPOWERED

Same as CPD SUB but unpowered.

Technical Specifications

	C SUB unpowered
frequency response	38 - 120Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	128dB / 134dBpeak
dispersion angle (horizontal x vertical in degrees)	omni directional
recommended amplifier / system controller type	KS TA 2D or TA 4D / D MOD® or FIRMOD2®
transducer	4 x 10" - xtreme long excursion
power rms / peak in Watts (AES standard)	800 / 1,600
amplification / x-over	sub bass mode / high cut 70 or 120Hz (switchable)
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	72 x 58 x 72 cm 28.2" x 22.7" x 28.2"
weight (without options)	65 kg 143 lbs
features	M20 pole mount,
options	black HD cover, frontcover with wheels, finish available in 200 RAL colors

Technical Specifications

	CPD SUB powered
frequency response	38 - 120Hz +/-3dB controlled
output SPL (pink noise at 6dB crest factor)	128dB / 134dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
integrated amplifier / system controller type	2 x PWM / FIR CONTROL® DSP
transducers	4 x 10" x-treme long excursion
power rms/peak in Watts (AES standard)	800 / 1,600
amplification / x-over	bridge mode / high cut 70 or 120Hz switchable)
input signal	automatic detection analog or digital AES/EBU XLR3
input connectors	XLR3, powerCON inlet (117/230VAC)
output connectors	XLR3 - thru / powerCON outlet
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	72 x 58 x 72 cm 28.2" x 22.7" x 28.2"
weight (without options)	70 kg 154 lbs
features	ethernet in/out, remote controlled, integrated digital delay with display, M20 pole mount, wheels, self regulating power supply
options	black HD cover, frontcover with wheels, finish available in 200 RAL colors

T SUB UNPOWERED

With the T SUB subwoofer KS AUDIO has set a new bench mark for a very impressive subwoofer performance.

The T SUB makes an impressive bass fundamental, even in the lowest octave of the low frequency band. The T SUB produces the frequencies that your ears expect in large spaces and in open air applications. This is achieved by the use of eight highly resilient 10" long-throw woofer with a 30 mm voice-coil, an extra long excursion and double magnets.

The relatively small moving mass of the coated membranes in connection with push-pull technology produces a precise in-and out transient response. The drivers are designed in specially engineered enclosures with exact acoustically tuned properties. This minimizes any possible distortion.

The performance is much more impressive than with any conventional divers sizes like 12", 15", 18" or even larger sizes.

The speaker cabinet itself has very little vibration due to its strategically reinforced plywood construction.

The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored Polyurethane coating. At your request the finish available can be changed to any desired color from the RAL color charts. Handholds, 4 stable wheels and a protective grill, with or without acoustic foam, are further features of this high-quality product.

The T SUB is the perfect low frequency extension enclosure for many other KS AUDIO top enclosures and in particular for the C LINE and T LINE Arrays. The T SUB should be driven by the KS AUDIO power amplifiers TA4D or TA2D.

Please note, all specifications are only achieved using KS AUDIO amplifiers and controllers.

University
Seoul, Korea

Technical Specifications

	T SUB unpowered
frequency response	35 -70/ 120Hz +/- 3dB controlled
output SPL (pink noise at 6dB crest factor)	134dB / 140dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
recommended amplifier / system controller type	KS CA 4D, TA 2D or TA 4D / D MOD® or FIRMOD2®
transducer	8 x 10" x-treme long excursion
power rms / peak in Watts (AES standard)	1,600 / 3,200
amplification / x-over	woofer mode / high cut 70 or 120Hz (switchable)
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	58 x 116 x 88 cm 22.8" x 45.7" x 34.6"
weight (without options)	108 kg 176 lbs
features	8 handles, 4 wheels
options	black HD cover, frontcover, finish available in 200 RAL colors

CPD LINE POWERED

FIRTEC® inside

The CPD-LINE compliments the CPD series by adding a compact line array system to the lineup. The power for the three drivers of the CPD-LINE are produced from the latest generation "cold" PWM amplifier for deep middle tone drivers and a FET-amplifier with the best audio characteristics for the mid-high compression driver. Each of the two 8" woofers delivers 200Wrms /8 Ohm and the single 1" HF compression driver delivers 100Wrms /16 Ohm. With this 500Wrms total power, a single CPD LINE system can produce 125dB SPL peak.

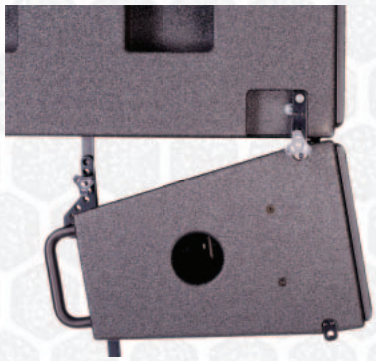
What makes the CPD LINE unique is: after you choose the layout of the system, either from our engineered setup charts or your experience. The necessary set-ups for different lengths and curvings are pre-set in the loudspeaker software, and easy to access. You simply choose the number of speakers, the angles between them, and the system creates the optimum acoustic line array dispersion for the venue.

Every room has unique acoustic properties and issues, with the CPD system adjusting each individual speaker to compensate for these acoustic issues is made easy. Each loudspeaker, with its individually assigned IP address, can be individually adjusted and monitored with KS AUDIO REMOTE 3 software over an Ethernet network. Each CPD LINE loudspeaker has an integrated network switch which allows the speakers to be linked. All CPD LINE adjustments can easily be made on your PC.

The rear mounted 2-way FIR CONTROL® DSP amplifier operates very efficiently without the need of a cooling fan. The FIR crossover and filters are specially matched to the drivers, with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR F+M connectors. The control panel also has a digital volume control to individually adjust for each venue and a digital delay up to 140ms or 40m, (120ft)for time alignment and decentralized PA systems. There is a Low Cut switch for speech reproduction or for adding a subwoofer to the system. Operation and set-up with a PC using the KS AUDIO REMOTE 3 software is also possible over an Ethernet connection.

Technical Specifications

	CPD LINE powered
frequency response	60 - 20,000Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	125dB / 128dB peak (single speaker)
dispersion angle (horizontal x vertical in degrees)	120 x 7.5
integrated amplifier / system controller type	PWM, FET-amp / FIRTEC®, DSP
transducers	2 x 8" ND cone + 1" ND compression driver
power rms/peak in Watts (AES standard)	400 + 100 / 800 + 200
amplification / x-over	2-way bi-amp / 1,000Hz linear FIRTEC
input signal	automatic dedection of analog or digital AES/EBU XLR3
input connectors	XLR3, powerCON inlet (117/230VAC)
output connectors	XLR3 - thru / powerCON outlet
cabinet	birch plywood
grill	perforated RVS
finish	charcoal polyurethane
dimensions (height x width x depth)	27 x 58 x 40 cm 10.6" x 22.7" x 15.7"
weight (without options)	20 kg 44 lbs
features	ethernet in/out, remote controlled, integrated digital delay, array presets with display, integrated C-RIG flyware, self regulating power supply
options	C-RIG craddle, flightcase for 4 pieces, outside foam, black HD cover, finish available in 200 RAL colors

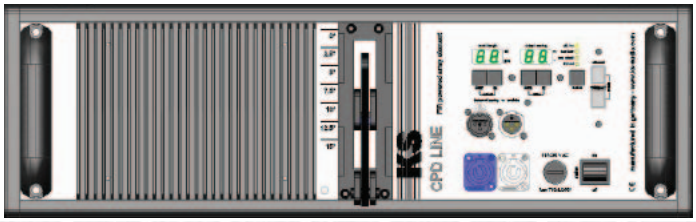


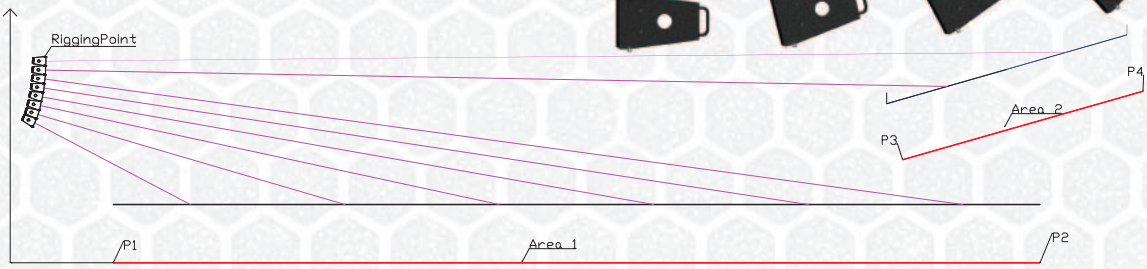
FIRTEC® inside

CPD LINE AC AutoCurve®

WORLD PREMIER OF THE SELF ALIGNING AND EQUALIZING ARRAY SYSTEM

Compact Line Array system with remotely controlled motorized angel adjustment and full remotely controlled software equalization.





KS AUDIO CPD LINE AutoCurve® Line Array with FIRTEC® DSP built-in

AutoCurve® is an intelligent remote-controlled line array re-angling and automatic compensation re-equalization innovation from KS AUDIO.
The CPD LINE AutoCurve® is a compact line array enclosure system, with built-in hang-angle re-adjustment motors and an automatic FIR processing / equalization compensation program to main constant image dispersion array curves irrespective of changes to the listening environment.

AutoCurve® is the absolute latest innovation in KS AUDIO digital control system products, and it is the only one of its kind! It was introduced at the Frankfurt Musikmesse 2011 to rave reviews…

The AutoCurve® system is comprised of the following components:
-CPD top enclosure units, each fitted with two 8-inch mid-frequency drivers and a 1-inch high-frequency compression driver (center mounted behind a NeXT® wave guide excursion). Installed in each is the now-famous FIRTEC® DSP to regulate the FIR processing for linear phase and frequency response.
-Rear-mounted, self-powered 1000 Watt amplification driven by the latest KS AUDIO MOSFET PWM (Class D) FET amplification technology, whereby an audiophile-like high-frequency performance is attained at the NeXT® cylindrical wave guide.

How does it work? The CPD LINE AutoCurve® Line Array is set up at the event quickly (no array curves or pre-processing are necessary--just hang the system straight out of the flight cases with no worries, as all physical adjustments can be controlled remotely after hanging the system). The enclosures accept both analog and digital input signals and automatically select the signal present in either input type. Input signals of up to 24 dBv are possible. Irrespective of the input signal selection, a digital AES/EBU throughput is derived to supply signal to further enclosures in the hang. Ethernet connections are also fitted in each enclosure to facilitate full network communications with the Remote program (each enclosure is given its own IP address so the entire system is controlled and regulated down to the most intricate level of detail).

From the FOH position--or any position in the venue, wirelessly--the Remote PC program is used for direct control of the physical array dispersion angles between each enclosure, utilizing electric motors secured inside each box, with an accuracy of 1/10th of a degree. Using FIRTEC® advanced DSP, each slight change in angle of any box results in the automatic adjustment of FIR processing and phase / equalization curve characteristics to match the environment--thus, in direct coordination with the change of degrees in the angles, the expected dispersion array curves are maintained for the changes in the auditorium, stadium, or stage. This is the first system of its kind--each enclosure can be remotely adjusted in angle from the FOH (or any position), with each adjustment resulting in independent enclosure and whole-array automatic FIR DSP changes for the optimum frequency / phase / alignment for that given curve! All this happens in real time, live, through the ethernet system--which carries data for electro-mechanical adjustments and automatic re-equalization curving parameters directly for the entire system, or individual enclosures.

Finally, the AutoCurve® system enables the sound engineer at the FOH location (or anywhere) to reposition the vertical hang, box above box, into other curve configurations, while simultaneously and automatically a re-equalization and compensation is carried out in real time. And this can happen any time--BEFORE, or EVEN DURING PERFORMANCES. Simultaneous image equalization and dispersion characteristics are maintained with perfection throughout the concert.

Additionally, the Remote PC program gives the engineer access to all FIRTEC® DSP programmable functions, such as digital equalization, high and low pass filters, limiters, and the all-important time alignment parameters. This provides the same functionality as all other Remote programs for FIRTEC® DSP-enabled products, so as to maintain dispersion imaging standards and ease of operations from one enclosure model to another out in the field, including mixed-enclosure system setups. When further adjustments are needed, the sound engineer can access all internal parameters and functions along with a visual display of the array polar patterns to finalize the imaging perfectly.

A second program also allows the engineer to input the dimensions of the venue, including balconies, and it then calculates the perfect angles for the given sizes. The engineer hits the “GO” button, and the array adjusts the physical alignment as well as the FIR settings. The engineer can then adjust the intricate details of the system via the Remote PC program. This enables a system to be setup, physically adjusted and “tuned” for the venue, and tested and further adjusted by the engineer literally in a fraction of the time it normally takes--with changes in the entire system, even during the event, taking place at the touch of a button!

KS Audio presents the CPD LINE AutoCurv®e Line Array with FIRTEC® DSP… an exclusive innovation that changes live sound forever!

C LINE UNPOWERED

With the T LINE, KS AUDIO established its name as a manufacturer of excellent LINE-ARRAY systems for the professional audio market. With the C LINE from KS AUDIO introduces a new Line-Array system with superior audio performance and extreme ease of handling. The C LINE array makes it possible for every professional user to create - in no time - a perfect radiating and performing line-array set-up.

The cabinets comprise two 8" direct radiating carbon-fibre cone transducers and a 1" neodymium compression driver with a mylar diaphragm. The 1"driver is mounted on a wave-guide that is also used in the KSdigital LINE MASTER studio monitor, which is well known for its superb audio performance.

The behaviour of single cabinets, and the behaviour of complete arrays (stacked cabinets) was thoroughly researched when KS AUDIO developed the T LINE. KS developed as well a uniquely dedicated FIRTEC® DSP controller also used in the C LINE .

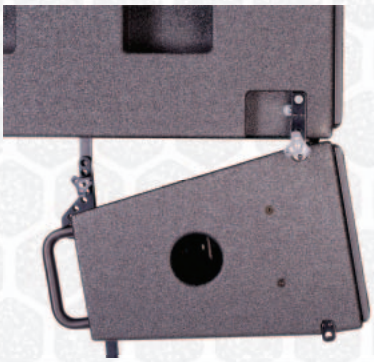
As the main speaker system for theatres and live touring, as a speech/music system in churches and arenas, and as a delay System for mega events, the C LINE impresses at all levels by its exact dispersion, accurate audio performance and very compact size and low weight.

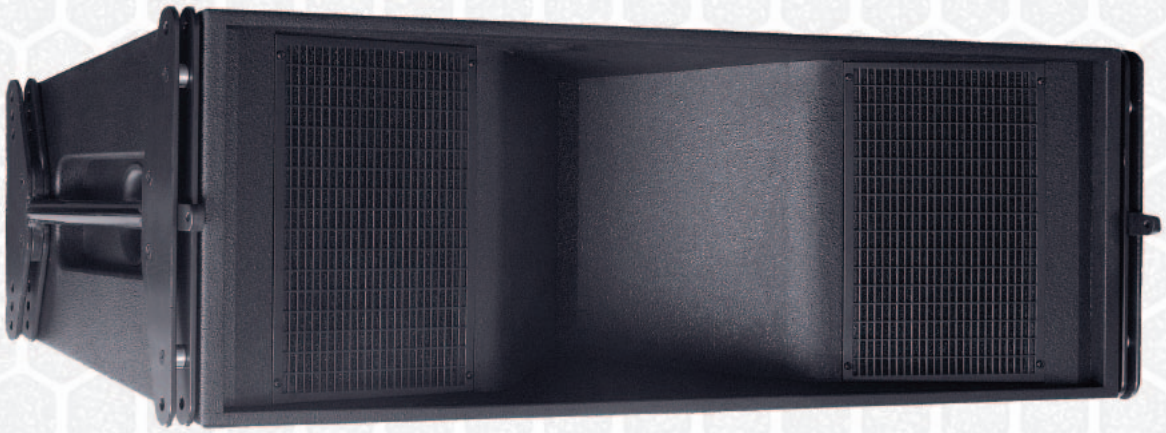
By using the low extenders T SUB, C WL or C SUB you can create in combination with the C LINE a three-way active system with a frequency response down to 35Hz. The speaker cabinet construction is, like all KS AUDIO systems, built from birch plywood with an extremely robust charcoal colored Polyurethane coating.

The C LINE is powered by KS AUDIO 4-channel amplifiers: CA 4D or TA 4D in bi-amp mode with the FIRMOD2® controller which contains the DSP system.

Technical Specifications

	C LINE unpowered
frequency response	60 - 20,000Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	125dB / 131dB peak (single speaker)
dispersion angle (horizontal x vertical in degrees)	120 x 7.5
recommended amplifier / system controller type	KS CA 4D, TA 4D / FIRMOD2®
transducers	2 x 8" ND cone + 1" ND compression driver
power rms / peak in Watts (AES standard)	400 + 100 / 800 + 200
amplification / x-over	2-way bi-amped/ 1,000Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS
finish	charcoal polyurethane
dimensions (height x width x depth)	27 x 58 x 40 cm 10.6" x 22.7" x 15.7"
weight (without options)	15 kg 33 lbs
features	integrated C-RIG flyware
options	C-RIG cradle, flightcase for 4 pieces, outside foam, black HD cover, finish available available in 200 RAL colors





T LINE UNPOWERED

The KS AUDIO T LINE is a Line Array system which sets the standard in audio quality for all live event.
The enlosure is a 2 way design and has a basic dispersion of 90° by 5° and a frequency response of 60Hz to 19KHz. The addition of the KS AUDIO subwoofer T SUB extends the frequency response to 35Hz. Each T LINE enclosure is loaded with 2 x 12" speakers and a 2" compression driver. Both types of driver use neodymium magnets.

The T LINE is powered by the KS AUDIO 4-channel amplifier TA 4D. Two channels in bi-amp mode, can power two T LINE cabinets, two TA 4D amplifiers therefore, can power an 8 box array.

The unmatched audio quality of the KS AUDIO line array T LINE is complimented by its superb ease of use. The T LINE is controlled by the company's Firtec technology in the FIRMOD 2® controller module. It is common practice these days to use array configuration software to detemine the configuration of a line array. These types of software claim the ability to make very complex mathematical calculations (to determine the behavior of the wave front) based upon 2 or 3 physical measurements of a room. This cannot and does not work. At best, this method results in a different frequency response each time the configuration of the array is changed, at worst the complete breakdown of the wave front.

The KS AUDIO approach is to provide the user with a number of different array configuration presets. These presets show the correct angle to be used between each of the boxes in the array, and the attachment point of the rigging to the flying bumper. The REMOTE software is also used to control all system parameters in the FIRMOD 2® module.

Technical Specifications

	T LINE unpowered
frequency response	60 - 19,000Hz +/- 3dB
output SPL (pink noise at 6dB crest factor)	134dB / 140dB peak (single speaker)
dispersion angle (horizontal x vertical in degrees)	90 x 5 arrayable
recommended amplifier / system controller type	KS CA 4D, TA 2D or TA 4D / FIRMOD2®
transducer	2 x 12" ND cone + 2" ND compression driver
power rms / peak in Watts (AES standard)	1,000 + 100 / 2,000 + 200
amplification / x-over	bi-amped / FIRMOD2
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS
finish	charcoal polyurethane
dimensions (height x width x depth)	36 x 109 x 52 cm 14.1" x 42.8" x 20.4"
weight (without options)	54 kg 119 lbs
features	mounted T-RIG flyware
options	black HD cover, frontcover with wheels, outside foam, finish available in 200 RAL colors

Wuxi Project - Buddha Temple
Wuxi, China

SPIRIT POWERED

FIR CONTROL® inside

2 x CPD 08 powered top - details page 8
1 x CPD B powered subwoofer - details page 16

SPIRIT PLUS POWERED

2 x CPD 08 powered top - details page 8
2 x CPD B powered subwoofer - details page 16

SPIRIT

DRUM FILL

HDSP® inside

FIR CONTROL® inside

DRUM FILL POWERED

1 x CPD 10 powered top - details page 11
1 x CPD W1 powered subwoofer - details page 18

CDP 10 SET

HDSP® inside

FIR CONTROL® inside

CPD 10 SET POWERED

2 x CPD 10 powered top - details page 11
4 x CPD W1 powered subwoofer - details page 18

SAT 3 POWERED

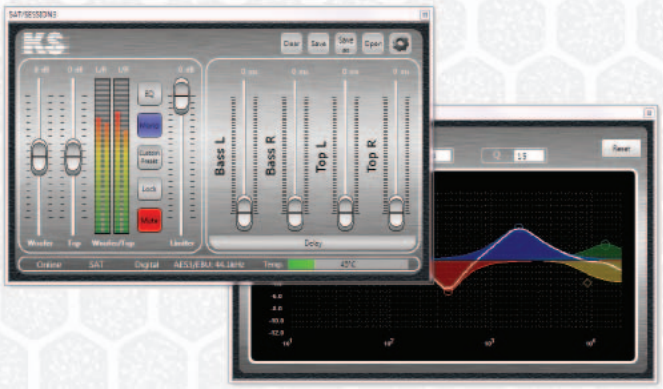
The KS AUDIO SAT 3 consists of a powered mono subwoofer with integrated amplifiers and a controller unit in one handy cabinet and two KS AUDIO C 1 satellite speakers, using a 10" driver and 1" compression HF driver handling 400 watts.

The HF driver is connected behind a directivity horn with HDSP® technology. The sound dispersion design of the HDSP mid/high frequency horn and its electronic blending with the bass/mid-range driver is very unique. The HDSP® design results in multiple integrated dispersion angles that widen downwards towards the near field of the speaker while maintaining tight pattern control and long throw capability. The vertical bending of the HF wave front continues thru the cut-off frequency as well as the crossover frequency, without any variance in the frequency response. This means that with a standard two-speaker setup, the audience in close proximity to the speakers will enjoy the same audio quality and definition as those further away. For more details see page 9. The woofer starts working at 38 Hz and at 600 watts, toneburst 1,200 watts and is responsible for a fundamental energetic bass enough even for the bigger venue. All controller electronics are on board the subwoofer CB 18, three amplifiers - woofer, left, right - with a peak power of 2kW, a DSP using FIR CONTROL® with corresponding compressors and limiters to ensure safe operation. The electronically balanced input is in the form of XLR-F connectors. Speakon speaker outputs, a PowerCON power inlet with on/off switch, and a USB port for operating and set-up the SAT 3 system using a PC with KS AUDIO REMOTE 3 software, level controls with display and a mute switch are further features of this system. The SAT 3 Satellite PA by KS AUDIO is a processor-controlled high performance sound reinforcement system with extraordinary features fitting easy in any compact car.

THE SAT 3 CAN BE EASILY EXTENDED BY ADDING ONE UNPOWERED CW 18, WHICH IN THIS CASE WILL BE POWERED by connecting to the existing CB 18 subwoofer as well.

Technical Specifications

frequency response	38 - 19,000Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	134dB (complete system)
dispersion angle (horizontal x vertical in degrees)	CB 18 - omni directional / 2 x C 1 in HDSP® details page 10
integrated amplifier / system controller type	PWM, SMPS with PFC / FIR CONTROL® DSP
components	1 x CB18 + 2 x C1 an additional CW 18 1 x 18" subwoofer can be added
transducers CB 18 / C1	1 x 18" + 2 x 10"+1" in HDSP technology - see page 9
power rms in Watts (AES standard)	1,200 + 2 x 400 / 2kW (1,200 + 2 x 400 Wrms with extra CW 18)
amplification / x-over	SAT mode / 120Hz + 1,200Hz
input signal	automatic dedection of analog or digital AES/EBU XLR3
input / ouput connectors	XLR3 / Speakon NL4 left-right-ext.subwoofer
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	1x CB 18 54 x 54 x 66 cm 21.2" x 21.2" x 25.9" 2 x C 1 50 x 29 x 28 cm 19.6" x 11.4" x 10"
weight (without options)	CB 18 38 kg 84 lbs C 1 17 kg 37 lbs
features	M20 pole mount, self regulating power supply
options	black HD covers, frontcover with wheels, finish available in 200 RAL colors



Technical Specifications

frequency response	38 - 120Hz
output SPL (pink noise at 6dB crest factor)	126dB / 132dB peak
dispersion angle (horizontal x vertical in degrees)	omni directional
recommended amplifier / system controller type	KS CB 18 active subwoofer (SAT 3) or KS amplifiers CA 4D, TA 2D, TA 4D / D MOD® or FIRMOD2®
transducer	18" long excursion cone / 4.5" voice-coil
power rms / peak in Watts (AES standard)	600 / 1,200
amplification / x-over	woofer mode / hi-cut 120Hz
input / output connectors	Speakon NL4
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	54 x 54 x 66 cm 21.2" x 21.2" x 25.9"
weight (without options)	40 kg 88 lbs
features	M20 pole mount
options	black HD cover, frontcover with wheels, finish available in 200 RAL colors

CW 18 unpowered

SESSION 3 POWERED

The KS AUDIO SESSION 3 consists of two powered mono subwoofers CB 18, integrated amplifiers and a controller unit in one handy cabinet and two KS AUDIO C 12 satellite speakers, using each a 12" chassis and 1.4" compression driver.

The driver is connected to a directivity horn with HDSP® technology. For details on HDSP® technology see page 9.

The woofer starts working at 38 Hz and at 600 watts, toneburst 1,200 watts and is responsible for a fundamental energetic bass beyond enough even for the bigger venue. All controller electronics are on board the subwoofer CB 18, three amplifiers - woofer, left, right - with a peak power of 2kW, a DSP using FIR CONTROL® with corresponding compressors and limiters to ensure safe operation.

The electronically balanced input is in the form of XLR-F connectors. Speakon speaker outputs, a powerCON power inlet with on/off switch, and a USB port for operating and set-up the SAT 3 system using a PC with KS AUDIO REMOTE 3 software, level controls with display and a mute switch are further features of this system The SESSION 3 is a complete processor controlled, high performance sound reinforcement system with extraordinary features, despite it's compact size.

THE SESSION 3 CAN BE EASILY EXTENDED BY ADDING TWO UNPOWERED CW 18 (see for details page 29 bottom) WHICH IN THIS CASE WILL BE POWERED BY THE ALREADY EXISTNG CB 18 SUBWOOFERS AS WELL.

Technical Specifications

	SESSION 3 powered
frequency response +/- 3dB	38 - 19,000Hz +/-3dB
output SPL (pink noise at 6dB crest factor)	134dB per side
dispersion angle (horizontal x vertical in degrees)	CB 18 - omni directional / C 12 in HDSP® details page 12
integrated amplifier / system controller type	PWM, SMPS with PFC / FIR CONTROL® DSP
components	2 x CB 18 + 2 x C 12
transducers CB 18 / C12	18" / 12" + 1.4" HDSP detail page 9®
power rms in Watts (AES standard)	2 x 1,200 + 2 x 700 + 100
amplification / x-over	SESSION mode / 120Hz + 1,200Hz
inut signal	automatic dedection of analog or digital AES/EBU XLR3
input / ouput connectors	XLR3 / Speakon NL4 left-right-ext.subwoofer
cabinet	birch plywood
grill	perforated RVS + acoustic foam (inside)
finish	charcoal polyurethane
dimensions (height x width x depth)	2 x CB 18 54 x 54 x 66 cm 21.2" x 21.2" x 25.9" 2 x C 12 58 x 35 x 41 cm 22.6" x 13.7" x 6.2"
weight (without options)	2 x 38 kg 84 lbs 2 x 21 kg 46 lbs
features	M20 pole mount, self regulating power supply
options	black HD covers, frontcover with wheels, finish available in 200 RAL colors, extension subwoofer CW 18 see page 29 bottom

ConSet 1 UNPOWERED
MULTI CONFIGURABLE PA SYSTEM

3-way (2 way active)
2 x C 12 unpowered top - details page 12
2 x CW L unpowered subwoofer, bridged mono - details page 21
1 x TA 4D power amp - details page 32, with D MOD® or FIRMOD2® controller, details page 34
38 - 19,000 Hz, 2,800 Wrms, 135dB / 141dB, C 12 HDSP® mid/horn near field

HDSP® inside

FIRTEC® inside

ConSet 2 UNPOWERED
MULTI CONFIGURABLE PA SYSTEM

3-way (2 way active)
2 x C 12 unpowered top - - details page 12
4 x CW L unpowered subwoofer, bridged mono page 21
1 x TA 4D power amp - details page 32, with D MOD® or FIRMOD2® controller, details page 34
38 - 19,000 Hz, 2,800 Wrms, 135dB / 141dB HDSP® mid/high horn, C 12 HDSP® mid/horn near field

ConSet 2
1 SIDE ONLY

FIRTEC® inside

ConSet 3 UNPOWERED
MULTI CONFIGURABLE PA SYSTEM

3-way
2 x C 1214 unpowered top - details page 13
4 x CW L unpowered subwoofer, bridged mono, details page 21
2 x TA 4D power amp - details page 32, with D MOD® or FIRMOD2® controller, details page 34
38 - 19,000 Hz, 4,800 Wrms, 138dB / 144dB, C 1214 - Coaxial low/mid-high mid far field

ConSet 3
1 SIDE ONLY

HDSP® inside

FIRTEC® inside

ConSet 4 UNPOWERED
MULTI CONFIGURABLE PA SYSTEM

4-way
2 x C 12 unpowered top - details page 12
2 x C 1214 unpowered top - details page 13
4 x CW L unpowered subwoofer - details page 21
2 x T SUB unpowered subwoofer - details page 23
3 x TA 4D power amp - details page 32
1 x TA 2D power amp - details page 32, D MOD® or FIRMOD2® controller, details page 34
35 - 19,000 Hz, 9,000 Wrms, 140dB / 146dB, C 12 HDSP® mid/horn near field
C 1214 - Coaxial low/mid-high mid far field

ConSet 4
1 SIDE ONLY

CA 4D

TA 4D

TA 2D

Specifications Power Amps

	CA 4D	TA 4D	TA 2D
full range & bi-amp mode			
referenced /rms power @ 4 ohm			
channel1	700w	1,000w	2,000w
channel 2	350w	1,000w	2,000w
channel 3	700w	1,000w	
channel 4	350w	1,000w	
dual bridge mode			
referenced / ms power @ 8 ohm			
channel 1 + 2	700w at 8 ohm	2,000w	4,000w
channel 3 + 4	700w at 8 ohm	2,000w	
Tri-amp mode			
referenced / rms power			
channel 1 + 2	700w at 8ohm	2,000w	
channel 3	700w at4 ohm	1,000w	
channel 4	350w at 4 ohm	1,000w	
bridged channels can be run at 4 ohm total power of all channels driven	2000w	4,000w	4,000w
amplifier type	MOSFET triple supply voltage	MOSFET triple supply voltage	MOSFET triple supply voltage
frequency range (not controlled)	5Hz - 50,000Hz	5Hz - 50,000Hz	5Hz - 50,000Hz
signal to nosie ratio, A weighted	more than 115dB	more than 115dB	more than 115dB
THD at full rated power	less than 0.05%	less than 0.05%	less than 0.05%
damping factor (1 kHz and below)	more than 1,000	more than 1,000	more than 1,000
amplifier protection	short circuit, open circuit thermal, ultrasonic and RF, ELF	short circuit, open circuit thermal, ultrasonic and RF, ELF	short circuit, open circuit thermal, ultrasonic and RF, ELF
signal input	4 x 1.58V balanced XLR3 female	4 x 1.58V balanced XLR3 female	2 x 1.58V balanced XLR3 female
signal output	4 x balanced XLR3 male	4 x balanced XLR3 male	2 x balanced XLR3 male
power output	4 x Speakon NL 4	4 x Speakon NL 4	2 x Speakon NL 4
controls back	on / off	on / off	on / off
indicator back	4 channel controller mode	4 channel controller mode	2 channel controller mode
control front	on / off mute, 4 channel output mute	on / off mute, 4 channel output mute	push-rotary knob for DSP controller
indicator front	AC mains, 4 channel signal present, 4 channel mute on / off	AC mains, 4 channel signal present, 4 channel mute on / off	display, chipcard memory, status LED
controller slot	KS AUDIO D MOD® or FIRMOD2®	KS AUDIO D MOD® or FIRMOD2®	integrated KS AUDIO FIRTEC® DSP
mains	100-250Vac / 5-10 A self regulating power supply	100-250Vac / 10-20 A self regulating power supply	100-250Vac / 10-20 A self regulating power supply
power inlet	powerCON	powerCON	powerCON
size (width, heights, depths)	19" x 2 U x 350mm (13.73")	19" x 3 U x 350mm (13.73")	19" x 2 U x 350mm (13.73")
weight	8 kg 16.6 lbs	14 kg 30.8 lbs	12 kg 26.4 lbs

Altamonte Springs, FL
Apex, NC
Apopka, FL
Altamonte, FL
Atlantic, FL
Cary, NC
Cortez, FL
Hilliard, OH
Lakeland, FL
Lakeland North, FL
Largo, FL
Lake Mary, FL
Matthews, NC
Bloomingdale, FL
Orlando, FL
Seminole, FL
Six Forks, NC
Tampa, FL
University, NC
Winterhaven, FL
Brandon, FL
New Albany, OH
Orlando, FL

FIRTEC® inside

FIRMOD2® DSP CONTROLLER

The FIRMOD2® is the latest digital controller from KS AUDIO that guarantees the perfect sound and the simplest handling, all at the same time. It is designed to work with all 4 channel KS AUDIO amplifiers such as the CA 4D and the TA 4D. The special FIR filtering technology KS AUDIO has developed over the years, allows you to equalize the signal in real time for linear frequency response and phase curves.

The FIRMOD2® DSP fits in the same front loading slot as the analog card. So by upgrading the analog cards, the entire audio system will be upgraded in quality and features. By downloading a particular program from a memory card, the input signals as well as the output signals are automatically configured. Any configuration like a 4 in / 4 out, 3 way, bridged mode, additional crossed over output and bi amped versions are recallable.

The FIRMOD2® DSP allows the signal, for speech and music, the highest quality standard in analog or digital, directly before the amp. For more complex situations, the KS AUDIO REMOTE program is available that allows all parameters and control functions to be operated from your PC.

To operate sound systems in different venues can be difficult at times, therefore the control of functions and features should not be solely dependent on a PC. Therefore, KS AUDIO has chosen memory cards for safe, easy, in the field programming. In addition, there is a default program that the user can not erase and which is available even in the event of miss handling.

The FIRMOD2® DSP memorizes 2 different programs as well as the default program (user defined) at the same time, between which the user can select. Very little additional programming is needed. To stop unauthorized operation, the FIRMOD2® DSP can be locked with a special key card. A one time insert of the key card locks the system. With every new startup of the amplifier, the program is still locked and will not change.

The operation of the digital card has been simplified to a one rotary knob operation that allows you to turn both ways and push to select the parameter to adjust. Every modification is shown immediately on the display. Additionally, 4 LED's show the limiting clearly from a distance. All changeable parameters depend on the program and are designed and limited for each speaker system it is recalled to access.

FIRTEC® is a propriatary DSP programm providing time alingment, limter, FIR filters, cross over, compressor and equalization correction to the source signal. The recorded performance of each individual finished enclosure is stored in the FIRTEC® DSP propriatary program on board the FIRMOD2® module. Other FIRTEC® programs of KS AUDIO enclosures can be loaded into the DSP from the memory cards to match the selected enclosure that is outputted to the KS AUDIO amplifiers CA 4D and TA 4D in which the FIRMOD2® card is intalled.

20dBu balanced analog inputs, 27 Bit A/D AES/EBU 110ohms digital input and transfer 30 - 96 kHz sample rates SHARC DSP ChipCard programming

FIR CONTROL® inside

Technical Specifications

frequency response +/- 3dB	5 - 20,000Hz (without filtering)
analog inputs	4 x 20dBv balanced, 27 Bit A/D
digital inputs	2 x AES/EBU 110ohms, balanced
sample rates	30 - 96kHz SR
signal processing	2 x DSP
operating modes	4-ch, 2-ch biamp, 1-ch triamp, 2-ch woofer bridge mode
speaker equalization	FIR filters
user interface	hardware (soft control, switch, LEDs)
dimensions (height x width x depth)	40 x 230 x 120 mm 0.15" x 0.9" x 0.5"
weight	0.6 kg 1.3 lbs

D MOD®

5 - 20,000Hz (without filtering)
4 x 20dBv balanced, 27 Bit A/D
2 x AES/EBU 110ohms, balanced
30 - 96kHz SR
2 x DSP
4-ch, 2-ch biamp, 1-ch triamp,
2-ch woofer bridge mode
FIR filters
hardware (soft control, switch, LEDs)
40 x 230 x 120 mm 0.15" x 0.9" x 0.5"
0.6 kg 1.3 lbs

D MOD® DSP CONTROLLER

The D MOD® is a loudspeaker controller module with digital signal processing for the KS AUDIO amplifier Series CA4D and TA4D. The D MOD is a singular convincing solution for perfect sound with the simplest of operation.

The programming of your loudspeaker system is pre-installed at the factory. The signal inputs, and the performance outputs are automatically configured to be correct for the system configuration that is ordered and will automatically switch between analog and digital inputs. The system adjustment controls are limited but substantial: Depending upon the operating mode, the level and corner frequencies or individual filters are adjustable. LEDs indicate the various operating conditions.

The KS AUDIO controller D MOD® module replaces the analog A MOD® controller after 15 years of faithful service. The appearance of each module is similar and they all insert into the front slot of the CA4U, TA4U and other future models of 4 channel performance amplifiers. The special feature of the D MOD® is the digital signal processing with FIR filters. This enables to equalize the audio signal in real time for linear frequency response and phase curves.

Any combination of the 4 channels is possible with the D MOD®: 4 full range channels, 2 channel (stereo) Bi-Amp, high speed bridge operation, and up to a single-channel 3-way active loud-speaker system with a bridged bass final stage, including an additional active frequency output and "BI-Amp" alternatively for each operating mode.

By simply replacing the controller in the front-lateral slot of the amplifier, the D MOD® controller module is the digital version of the tried and true analog A MOD® controller, however the digital D MOD® upgrades your public-address system with a substantial quality increase.

The DMOD® is the ideal solution for a consistent performance. By utilizing a standard configuration and software controlled programs, the highest audio quality possible is achieved. This configuration of hardware and software, which is fixed to a particular programm only, provides the price to remain clearly lower than that of the freely configurable FIRMOD2® controller card.

Up to 4 inputs are simultaneously processed both in the analog or the digital domain. As soon as an AES/EBU signal is detected the processing mode is automatically switched to digital input mode.
The main fields of application are public-address systems for Speech and Music of highest quality all digital up to the final stage.
This explanation indicates the basic operating modes of the D MOD®. The adjustable parameters depend on the recalled program for the respective loudspeaker system.

This Controller covers time alingment, limter, FIR filters, cross over, compressor and equalization per KS AUDIO speaker type.

FIRTEC® DSP TECHNOLOGY

FIRTEC® = Finite Impulse Response Technology

KS AUDIO has successfully developed a listening standard in loudspeaker design that guarantees the reproduction performance for each loudspeaker unit (fitted with FIRTEC®) for the stage, installation and studio production environments. The standard is FIRTEC® DSP control technology and it is exclusive only to KS AUDIO

The KS AUDIO standard is unique, and the first to create a standard of determinate quality of audio performance, whereby the loudspeaker faithfully reproduces the input signal in a finite and predictable way that can be measured, stored and replicated uniformly into each of the KS AUDIO DSP loudspeaker units for studio and stage equally.

The KS AUDIO unique FIRTEC® program digitally corrects and matches up the performance of the loudspeaker to the input signal, and in doing so, all effects of distortion, artificial imaging, colorations and other unwanted resonances that are the expected natural and normal by-products of transferring electrical energy out to atmospheric pressure via the exertion of a mass are removed. Therefore, the sound of the whole unit remains invisible to the listener, exposing only the original input signal for the first time. The listener is closer to the original performance than ever before, experiencing clear and accurate audio with little or no auditory fatigue.

Expertly engineered sound productions are only fully realized and experienced when replayed on KS AUDIO DSP studio and mastering reference monitors, or on stage with selected digital concert PA loudspeaker systems. KS AUDIO has successfully applied this technology in numerous installations such as various German Opera, Play Houses and the "Reichstag" (German Congress) in Berlin as well as in recording and broadcast studios across the world.

For 18 years, FIRTEC® DSP technology has been the express aim of KS AUDIO in Germany. It is currently available in several KS AUDIO products, both in powered and in un-powered systems. FIRTEC® DSP technology is a unique product innovation that separates KS AUDIO from all other manufacturers.

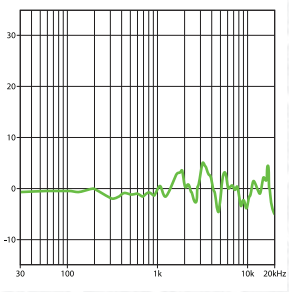
The application of Finite Impulse Response (FIR) is well known in the field of acoustic measurement. However, KS AUDIO has broken the chains that have locked out the availability of the incredible range of results achieved by the correct implementation of FIR in all aspects of the sound reproduction signal chain. KS AUDIO unique FIRTEC® DSP technology is the worlds first and fully successful implementation of FIR (Finite Impulse Response) in an enclosure-driver-loudspeaker of a traditional design.

FIRTEC® is a propriatary DSP programm providing time alingment, limter, FIR filters, cross over, compressor and equalization correction to the source signal. The recorded performance of each individual finished enclosure is stored in the FIRTEC® DSP propriatary program on board the FIRMOD2® module (for our power amplifiers CA 4D and TA 4D) or within the KS AUDIO selfpowered speaker equipped with FIRTEC®. Other FIRTEC® programs of KS AUDIO enclosures can be loaded into the DSP from the memory cards to match the selected enclosure that is outputted to the KS AUDIO amplifiers CA 4D and TA 4D in which the FIRMOD2® card is intalled.

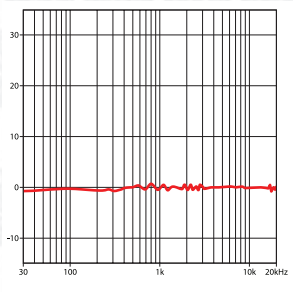
The result of FIRTEC® processing is: that it is possible to hear with clarity and accuracy as if one were listening to the original performance acoustically. Standardization of "flat frequency response," "positive phase response," and "precise center imaging," particularly for two or more speakers, is now the KS AUDIO "Sonic Truth" Standard.

Frequency Response

Analog

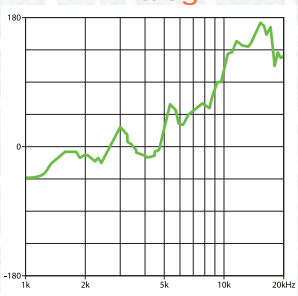


FIRTEC®

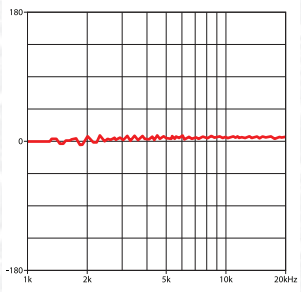


Phase Response

Analog

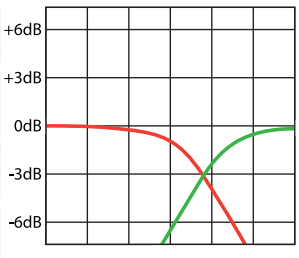


FIRTEC®

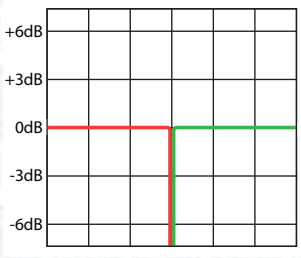


Crossover

Analog



FIRTEC®

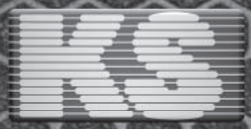


FIR CONTROL® DSP TECHNOLOGY

All KS AUDIO powered products runing under FIR CONTROL® feature the following technology:
for top boxes : DSP, FIR Filtering, Low Cut, EQ, Delay in ms, Controls for Gain, Volume and Mute
for subwoofers : same as the above but High Cut

Except for these powered products CPD 08, CPD1, CPD1 M and CPD B, all other powered products carry on top of the above listed features additional features such as Ethernet connection in and through, automatic detection of AES/EBU / analog signals.

Factory
KS Beschallungstechnik GmbH
Westendstr 1
67310 Hettenleidelheim
Germany



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